ACCOUNTING AND FINANCE ISSUES MOTIVATING SUBSIDIARY STOCK OFFERINGS

By

DEBORAH PENDARVIS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1998

ACKNOWLEDGMENTS

I wish to thank my dissertation committee Bipin Ajinkya John Simmons Joel Houston and Robert Emerson for their helpful comments and suggestions throughout the years I spent working on this project In particular I am grateful to Bipin Ajinkya for his patience support and guidance especially during this past year I also wish to thank Jay Ritter for the comments and suggestions he made on an earlier version of this paper

I appreciate the financial assistance provided by the Fisher School of Accounting at the University of Florida and the American Institute of Certified Public Accountants

I also want to thank Colleen Seale associate librarian and Tarrie Van Horn at Northeast Regional Data Center for their help during this project Finally I express my extreme gratitude to my terrific son Eric for managing so well while I was busy in the doctoral program

TABLE OF CONTENTS

page

ACKNOWLEDGMENTS i

ABSTRACT vii

CHAPTERS

1 INTRODUCTION 1

2 SUBSIDIARY EQUITY ISSUANCE AND CONSOLIDATION ACCOUNTING 8

- Accounting Theory 8
- Numerical Example of Accounting Issues 12

3 PRIOR RESEARCH ON SUBSIDIARY STOCK OFFERINGS 14

4 EARNINGS MANAGEMENT 19

- The Potential for Earnings Management 19
- Incentives for Managers to Manipulate Reported Earnings 24
- Compensation and Incentives to Increase Earnings 24
- Debt and Incentives to Increase Earnings 26
- Accounting Alternatives for Earnings Management 28

5 CORPORATE FINANCE THEORY 31

- Overvaluation Hypothesis 32
- Earnings Prospects Hypothesis 34
- Investment Opportunities and Stock Offerings 35

6 EMPIRICAL METHOD 38

- Research Design 39
- Sample Selection 40
- Descriptive Statistics 42
- Explanatory Variables 51

7 RESULTS AND INFERENCES 56

Univariate Tests of Predictions of the Earnings Management Hypothesis 56
Univariate Tests of Predictions from Corporate Finance Theory 66
Multivariate Analysis of the Stock Issuance 77

8 CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH 86

APPENDICES

A ENRON COMMENT LETTER ON EXPOSURE DRAFT 91

B TESTS OF FINANCE HYPOTHESES USING SUBSAMPLE OF PARENT FIRMS 94

REFERENCES 99

BIOGRAPHICAL SKETCH 107

LIST OF TABLES

Table page

6-1 Parents and Subsidiaries 43

6-2 Descriptive Statistics for Parents and Their Subsidiaries 47

6-3 Comparison of Parents Recognizing Gains to Parents Not Recognizing Gains 48

6-4 Earnings Statistics (Scaled by Lagged Assets) for Year Before and Year of Offer for Parents with Gains from Subsidiary Offers and an Industry-Matched Sample 49

6-5 Descriptive Statistics for Parents with Subsidiary Offerings and Parents with Parent Offerings for Year of Offer 50

7-1 Parents Recognizing Gains Components of Earnings for Year Before and Year of Offer 57

7-2. Parents Recognizing Gains Components of Earnings for Year Before and Year of Offer Scaled by Lagged Assets 61

7-3 Parents Recognizing Gains Change in Leverage In the Two Years Before the Offer 62

7-4 One-Year Change in Financial Statement Variables (Scaled by Lagged Assets) for Parent Firms and an Industry-Matched Sample 64

7-5 Discretionary Accrual Measures for Parents Recognizing Gains on Subsidiary Offerings and an Industry Matched Sample 65

7-6 Two-Year Change in Leverage Prior to Year of Subsidiary Stock Offering for Parent Firms and an Industry-Matched Sample 67

7-7 Parent Firms with Subsidiary Offerings Compared with a "Matching" Sample of Parent Firms that Issued their Own Stock 68

7-8 Parent Firms with Subsidiary Offerings Compared with a "Matching" Sample of Parent Firms that Issued their Own Stock 70

7-9 Tests of the Profitability of the Firm's Investment Opportunities 72

7-10 Comparisons of Actual Growth Measures 74

7-11 Tests on Levels and Changes in Leverage 75

7-12 Proxies for Determinants of the Stock Issuance Decision 78

7-13 Pearson and Spearman Correlation Matrices Between the Subsidiary Stock Choice and Various Proxies for Potential Determinants of the Subsidiary Stock Choice 80

7-14 Determinants of Parent Type—All Firms Including Regulated Firms 81

7-15 Determinants of Parent Type—Regulated Firms Excluded 84

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

ACCOUNTING AND FINANCE ISSUES MOTIVATING SUBSIDIARY STOCK OFFERINGS

By

Deborah Pendervis

August 1998

Chairman: Bipin B. Ajinkya
Major Department: Fisher School of Accounting

In 1983, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin 51 (SAB 51) which permitted, but did not require, companies to recognize gains or losses arising from stock issuances by their subsidiaries. Before SAB 51, the SEC had required any implicit gains arising from these types of transactions to be reported as adjustments to paid-in-capital on the consolidated balance sheet.

In this dissertation, I examine two issues related to stock offerings of consolidated subsidiaries. First, I investigate whether managers manipulated reported earnings by taking advantage of the option allowed by SAB 51 to recognize gains on subsidiary offerings. I test the following three implications of the earnings management hypothesis: 1) managers use the gains to offset a decline in earnings, 2) managers report the gains on the income statement to reduce the likelihood of violating accounting-based provisions in debt agreements, and 3) managers use a "portfolio" of accounting methods to manipulate earnings such as accruals and extraordinary items

Second, I investigate managers' incentives to issue equity at the subsidiary level. In this part of the dissertation, I focus on finance considerations that could suggest a potential advantage to offering subsidiary equity over parent equity. In particular, a subsidiary offering may allow managers to avoid issuing shares in an undervalued parent with relatively low growth opportunities. Results from this analysis will provide a basis for inferences concerning managements' earnings objectives and the influence of the projected accounting gain on the decision to issue subsidiary stock.

My results support the conclusion that finance considerations played a role in the decision to issue stock in a consolidated subsidiary while earnings management was a factor in the manager's accounting choice of recognizing the gain on the transaction. In particular, the evidence indicates that subsidiary stock offerings provided managers with an alternative equity financing arrangement that allowed them to avoid a potentially more costly offering of parent equity. Furthermore, the subsidiary stock transactions provided the added benefit of giving managers the option of recognizing a gain on the transaction. The results suggest that managers used the gain to offset nonrecurring loss items, items over which managers have discretion in the timing of their recognition.

CHAPTER 1
INTRODUCTION

In 1989, Atlantic Richfield reported its first quarter earnings had increased 75% from the year before. This increase was due primarily to a gain on its Income Statement of $634 million from a stock offering by its wholly owned subsidiary Lyondell Petrochemical. Without this nonoperating gain, net income for the first quarter would have declined about 29% from the year before. Two years earlier, Atlantic Richfield had recognized an after tax gain of $185 million from a stock offering by another of its wholly-owned subsidiaries ARCO Chemical. This transaction increased after tax net income by 17.6%. In a similar transaction in 1994, Atlantic Richfield recognized a $270 million net gain when a third subsidiary Vastar completed an initial public offering.

Prior to 1983, Atlantic Richfield's subsidiary stock transactions would have been treated as capital transactions in consolidated statements; any implicit gains (or losses) would have been reported as adjustments to Paid in Capital. In 1980, the American Institute of Certified Public Accountants (AICPA) published an Issues Paper "Accounting in Consolidation for Issuances of a Subsidiary's Stock." It recommends that gains (or losses) arising from issuances by a subsidiary be recorded in consolidated income for the amount received in excess of the parent's carrying amount. In 1983, in accordance with the recommendations of the Issues Paper, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 51 (SAB 51) permitting income statement treatment for such transactions pending a final decision by the Financial Accounting Standards Board (FASB).

The theoretical basis for allowing this alternative accounting treatment is that a subsidiary stock issuance is similar to a parent company's selling a portion of its investment in a subsidiary. Both transactions result in a decrease in the parent's ownership interest. In the latter transaction, parent companies have typically recognized gains (losses) in their consolidated statements, but, until 1983, they had not been allowed to recognize gains (losses) when the subsidiary itself issued the stock.

It is important to note that SAB 51 does not require gain recognition. Companies still have the option of entering the increase in Paid-In Capital on the balance sheet. By allowing either accounting treatment, the SEC is acknowledging that there are legitimate differences of opinion on conceptual issues related to consolidated statements. In October 1995, the FASB addressed a number of these issues in an exposure draft entitled Consolidated Financial Statements, Policy and Procedures. The statement reflects the FASB's view that consolidated financial statements should portray the parent company and its majority-owned subsidiaries as a single entity. With respect to subsidiary stock issuances, the proposed statement precludes recognition of gain or loss arising from any subsidiary stock transaction (irrespective of which party in the consolidated group issues the stock) that does not result in a loss of control.

Since 1983, a number of companies have reported sizeable gains from stock offerings by their subsidiaries. In 1992, American Express reported an after-tax gain of $425 million related to a public offering by its subsidiary, 1st Data Corporation. In 1993, a gain from a subsidiary stock offering by Allstate boosted Sears' net income by $835.1 million. In the most extreme case, Thermo Electron has reported gains from multiple subsidiary stock transactions in nearly every year for the past 10 years. These gains have accounted for 31% of its $241 million cumulative income from 1992-1994 and over 45% of its 1996 net income.

As these examples indicate, gains from a subsidiary equity offering can have a material effect on the parent's consolidated income statement. In contrast, when a parent issues its own stock, no gains (or losses) can ever be recognized. Although both of these equity financing arrangements can be treated as capital transactions, a subsidiary stock issuance currently offers managers of the consolidated entity the option of reporting gains either in capital or in income. In nearly all of the cases identified subsidiary stock issuances have resulted in gains reported on the current year's consolidated income statement.

The discretion that this accounting rule allows and the potential for misleading inferences from gain recognition suggest my first research question. *Do managers manipulate reported earnings by taking advantage of the option allowed by current consolidation accounting policies to recognize gains on subsidiary stock offerings?* I advance and test three predictions for earnings management. First, I examine whether managers used the gain from subsidiary stock offerings to offset a decline in earnings from the prior year. Next, I test whether managers used the gains from subsidiary offerings to maximize the slack in accounting-based debt covenant constraints. Finally, I examine whether managers used the subsidiary offering gains to complement other discretionary accounting decisions made to affect reported income.

Although accounting researchers tend to focus on the earnings impact of managerial decision making, it is likely that changes in corporate structure (such as equity offerings) are motivated by additional considerations. The corporate finance literature has generated a variety of theories to explain changes in capital structure, many of them based on stock price changes surrounding the events. This research focuses on the nature of the information about the firm that outsiders infer from a change in capital structure. For example, Miller and Rock (1985), Myers and Majluf

(1984) and Ross (1977) have developed information asymmetry models in which managers have superior information regarding some aspect of their firm such as their firm's earnings prospects investment opportunities and assets in place The models predict that the decision to issue equity reveals negative information about the firm that will cause on average, a decline in the firm's security prices The Myers and Majluf model posits a smaller information discount (and a lower cost of equity) for firms with valuable investment projects Thus an offering at the subsidiary level may provide financing flexibility[1] by allowing managers to issue shares in an overvalued subsidiary with growth opportunities in place of shares in an undervalued parent with relatively low growth (Nanda 1991) The notion that a subsidiary stock offering allows managers to avoid a more costly offering of parent equity provides the motivation for my second research question *Are the predictions and findings from the corporate finance literature consistent with management's decision to forego issuing parent equity?*

It is possible that theories from both accounting and finance are at least partly valid in characterizing managements decision to issue stock in a consolidated subsidiary By examining both the accounting and finance issues related to subsidiary stock transactions I provide a basis for inferences concerning management's earnings objectives and the influence of the projected accounting gain on the decision to issue equity at the subsidiary level In particular my study attempts to distinguish between opportunistic motives (often assumed by the earnings management literature) and finance considerations which would suggest that the managers structured the equity transaction as a subsidiary (as opposed to a parent) equity offering to minimize the cost of the stock transactions Evidence suggesting that a parent offering was financially inappropriate would imply that earnings management, if borne out by the data was likely to have been of second-order importance to managers That is the manager's strategy was primarily to obtain financing and the gain simply provided an added benefit of undertaking the transaction In that case any observations of empirical regularities related to the earnings management hypothesis may be interpreted as evidence of opportunism only with respect to managers choices of accounting methods

---

[1] This idea was suggested in two recently published papers: Allen and McConnell (1998) and Slovin and Sushka (1997)

On the other hand if the evidence supports the earnings management hypotheses but the data are inconsistent with predictions of corporate finance theory then it may be reasonable to infer that managements earnings objectives may have played a role in the decision to issue equity at the subsidiary level. Of course there are likely to be other sources of efficiency that I do not explore such as the ability to design more efficient incentive contracts for managers of newly created subsidiaries However evidence of a failure to structure the equity transaction appropriately would provide some basis for inferences concerning the role of managements financial statement strategies in the decision to issue equity in a consolidated subsidiary

This research study makes three contributions to the existing accounting literature First, it extends prior research on subsidiary stock issuances by examining various financial characteristics of those issuances occurring since 1983 following a change in accounting policy Prior research focuses primarily on the share price reaction to announcements of the subsidiary offering By contrast, this research relies on a variety of firm characteristics based on predictions from both accounting and finance theories to analyze the decision to issue stock in a subsidiary

Second this study supplements the results of recent research on earnings management. Early accounting research investigated managers use of accruals or changes in accounting methods to manipulate earnings This study extends more recent research into the use of financing and/or investing transactions to manage earnings (Bartov 1993; Hand, 1989 Hand Hughes & Sefcik 1990) In addition this research provides evidence of the influence of an accounting rule change on a subsidiary s decision to issue its own stock

Finally this study augments research on the influence of debt agreements on a manager's accounting strategies While most empirical research focuses on the importance of debt agreements in determining accounting policies in general few studies have examined the influence of bond covenant restrictions on managers choice of accounting policy for specific financing and investing transactions This study provides further evidence of the applicability of contracting costs in explaining managers accounting choices

My analysis supports the conclusion that finance considerations played a role in the decision to issue stock in a consolidated subsidiary while earnings management was a factor in the manager's accounting choice of recognizing the gain on the transaction In particular, the evidence indicates that subsidiary stock offerings provided managers with an alternative equity financing arrangement that allowed them to avoid a potentially more costly offering of parent equity Furthermore the subsidiary stock transactions provided the added benefit of giving managers the option of recognizing a gain on the transaction. The results suggest that managers used the gain to offset nonrecurring loss items items over which managers have discretion in the timing of their recognition [2]

This dissertation proceeds as follows The next chapter discusses the authoritative literature on accounting policies and procedures related to consolidated financial statements. Chapter 3 summarizes the prior research and identifies the differences between this present study and the earlier studies. Chapter 4 develops the earnings management hypothesis and the predictions to be tested. Chapter 5 discusses the predictions from corporate finance theory. Chapter 6 contains the sample selection procedures, descriptive statistics, and empirical method. Chapter 7 reports the results of the empirical tests. The last chapter provides a summary and conclusions.

---

[2] In a similar vein Francis et al (1996) find that managers manipulate earnings by not recognizing asset impairments when they have occurred but when it is advantageous to do so

CHAPTER 2
SUBSIDIARY EQUITY ISSUANCE AND CONSOLIDATION ACCOUNTING

Accounting Theory

Since at least 1959 when Accounting Research Bulletin No. 51 (ARB 51) on consolidated financial statements was issued, the accounting profession has maintained a strong position in favor of consolidated financial statements. Accounting Research Bulletin No. 51 (ARB 51) states "There is a presumption that consolidated financial statements are more meaningful than separate statements and that they are usually necessary for a fair presentation when one of the companies in the group directly or indirectly has a controlling financial interest in the other companies" (American Institute of Certified Public Accountants, 1961, p. 41). Then, ARB 51 describes what was considered acceptable practice related to accounting in consolidation.

Financial Accounting Standards Board (FASB) Statement 94 issued in 1987 contains further support for consolidated statements. That statement amended ARB 51 to eliminate exceptions based on nonhomogeneous operations. The Statement prescribes consolidation of all majority-owned subsidiaries unless control is temporary or control does not lie with the majority owner.

With the exceptions of ARB 51 and FASB Statement 94, there has been a lack of authoritative literature on accounting and reporting standards for consolidated financial statements. Since the late 1970s, the FASB has received numerous requests for guidance on consolidation procedures from the AICPA, the SEC, and others. The

AICPA has described some of the major concerns in six Issues Papers which were sent to the FASB between 1978 and 1981. At the urging of the SEC, the FASB undertook a major project in consolidation accounting that resulted in a discussion memorandum in 1991 and an exposure draft published in October 1995. While the FASB project has been in progress, the SEC has provided interim guidance on a number of issues related to consolidated financial statements.

The absence of a comprehensive conceptual framework on consolidation policies has resulted in a gradual evolution of current consolidation practices that reflects a hybrid of two consolidation theories: the economic entity (also known as the entity theory) and the parent company concept. Under the economic entity concept, consolidated financial statements are intended to provide information about a parent company and its majority owned subsidiaries operating as a single unit. Minority interests in the net assets of the subsidiaries are included as part of the stockholders' equity section of the consolidated entity, even though the minority interests relate only to the subsidiaries whose shares they own.

The parent company theory focuses on the interests of the parent's shareholders. This theory views consolidated financial statements as extensions of the parent company's statements adjusted to reflect the fair market value of the parent's interest in the net assets of its majority owned subsidiaries. Only the parent company's shareholders' ownership interests are presented in the stockholder's section of the consolidated balance sheet. The minority interests are typically classified between the liabilities and stockholders' equity sections.

The inconsistent application of the two consolidation theories has resulted in what some consider to be contradictory accounting treatment for transactions that result in decreases in a parent's proportionate interest in its majority-owned subsidiaries. Generally, when the decrease takes the form of a parent itself selling some of the stock of its majority-owned subsidiaries, the prevailing practice has been to apply the parent company concept. That is, the sale has typically been viewed as a transaction with outsiders that gives rise to a gain or a loss, a view that is consistent with the parent company concept.

On the other hand, when the decrease in a parent's ownership of a majority-owned subsidiary takes the form of the subsidiary itself directly selling its unissued shares, the economic entity concept has--until recently (1983)--been the generally accepted view. Thus, the transaction has been perceived as one between the consolidated entity and its owners, as a capital transaction, for which neither gains nor losses are recognized.

In 1980, the AICPA concluded in an Issues Paper that changes in a parent's ownership percentage in a majority-owned subsidiary caused by the issuances of the subsidiary's stock should be recognized in consolidation as gains or losses. The position of the AICPA is that a transaction involving a subsidiary itself issuing additional shares is substantively equivalent to that of a parent selling a portion of its shareholdings in the subsidiary. In both cases, the parent as a majority holder makes the decision on the stock issuance and can determine how the cash proceeds are used. The Issues Paper argues that a parent should not be allowed to select alternative accounting methods by simply designating the subsidiary rather than itself as the issuing party.

In 1983, the SEC issued Staff Accounting Bulletin No. 51 allowing (but not requiring) recognition of gains or losses in consolidated statements resulting from a subsidiary's issuance of its own shares. Prior to SAB 51, the SEC required that such transactions be accounted for as adjustments to paid-in capital in consolidated statements Since its issuance of SAB 51 the SEC staff has expressed concerns about gain recognition when realization is not reasonably assured Furthermore the SEC has noted that financial statements filed with the SEC have included gains with no deferred taxes provided the AICPA Issues Paper specifically recommends deferred tax treatment. These concerns have prompted the SEC to consider rescinding SAB 51 (Financial Accounting Standards Board 1988) In 1989 in an effort to curtail abuses in gain recognition the SEC issued SAB No 84 barring gain recognition in two types of transactions in which the staff believed it is unlikely the parent will realize the gain

In 1987 as part of its consolidations project, the FASB issued Statement 94 requiring consolidation of all majority owned subsidiaries unless control does not remain with the owner of the majority voting interest or control is likely to be temporary In 1995 the FASB issued an exposure draft on consolidation policies and procedures the first of five phases of its consolidation project. When it becomes effective it will supersede ARB 51 and Statement 94 which are less comprehensive in scope However to date the board members continue to deliberate the exposure draft's conclusions Recently the Board announced that it would focus on general consolidation policy and would set aside specific consolidation procedures--including issues related to subsidiary stock transactions (Beresford 1996)

In establishing the proposed standard the FASB adopted the economic entity concept of consolidation which is consistent with the SEC's original position with regard to transactions involving the subsidiary's issuance of its own shares The proposed statement requires parents to adjust paid-in capital when a controlled subsidiary issues its own stock and bars completely any recognition of gains (losses) in consolidated statements Furthermore, the FASB extends this position to include any transactions in the stock of a controlled subsidiary whether purchase or sale (issuances) by the parent or the subsidiary itself The Board considers these to be substantively equivalent transactions in the equity of a reporting entity that includes a parent and its subsidiaries Therefore the exposure draft requires parent companies to account for any transactions in the stock of a controlled subsidiary as transactions in the equity of the consolidated group

Numerical Example of Accounting Issues

The following example illustrates the similarity and differences between the two different forms of subsidiary stock issuances--one by the parent and the other by the subsidiary itself

> Company S has 1 000 000 shares issued and outstanding all of which are owned by Company P Company P carries its investment in Company S (using equity accounting) at $20 a share or $20 000 000 Company P wants to maintain an 80% interest in Company S

Assume that Company P sells 20% of its investment in Company S or 200 000 shares for $30 per share A pretax gain of $2 000 000 would be recognized as follows

Sale proceeds	
(200 000 shares times $30)	$6 000 000
Book value of shares sold	
(200 000 shares times $20)	4,000,000
Pretax gain	$2 000 000

Alternatively Company S could issue 250 000 additional shares to outside investors for $30 per share Since Company P now owns 1 000 000 of the 1 250 000 shares outstanding its ownership interest in Company S is now at 80% The effect of this transaction on Company P s books is as follows

Company S s equity prior to stock issuance	$20 000 000
Proceeds from stock issuance	7,500,000
Company S s equity after stock issuance	$27 500 000

Company P s new equity in Company S (80% x $27 500 000)	$22 000 000
Company P s old equity in Company S	20,000,000
Pretax gain	$ 2 000 000

Note that the subsidiary must issue a larger number of shares than the parent would have to sell in order to achieve the same percentage ownership reduction (i e 250 000 shares issued by the subsidiary versus 200 000 shares sold by the parent will cause a 20% reduction in the parent s ownership interest) In addition there are no immediate tax consequences when the subsidiary issues its own shares but a tax liability is incurred when a parent sells a portion of its investment in the stock of a subsidiary to outsiders Thus for the same ownership reduction cash flows are greater when the subsidiary issues additional shares Also since the provision of income taxes on gains from subsidiary stock issuances is not a settled matter companies may treat the gains from subsidiary stock issuances as nontaxable This causes an even greater impact on earnings than would be achieved had the parent elected to sell its shares of subsidiary stock in a secondary offering

In this study I examine only those stock offerings undertaken by the subsidiary under conditions in which the subsidiary remained part of the consolidated entity My sample does not include parent offerings of subsidiary shares because during the period (1983-1994) covered by my study these transactions were generally associated with gradual divestitures and sell-offs

CHAPTER 3
PRIOR RESEARCH ON SUBSIDIARY STOCK OFFERINGS

Relatively few studies examine equity offerings at the subsidiary level. Schipper and Smith (1986) examined the association between the announcement of an initial public offering in a subsidiary ("equity carve-out") and the share price response of the parent's stock at the announcement of the carve-out. In contrast to the typical negative share price reactions to most equity offerings, they find a significantly positive reaction for equity carve-outs. Schipper and Smith examine a number of explanations for their results based on the assumption that the carve-out remains permanent. They do not distinguish between equity carve-outs as divestitures (temporary) and those that represent a more permanent equity decision by the consolidated entity.

Noting that Schipper and Smith's findings appear to contradict existing finance theory, Nanda (1991) developed a model to reconcile the apparent inconsistencies in the findings of a positive parent stock price response to an equity carve-out and the typically negative stock price reactions to other forms of equity financing. His model is an extension of Myers and Majluf's framework, which has often been used to explain the stock price movements in the period surrounding the announcements of seasoned equity offerings. Nanda makes the standard assumption of models with equity financing that the firms are unable to use debt to raise capital. In his model, firms can choose to finance investment opportunities by issuing equity in either the parent corporation or in a new subsidiary (equity carve-out). The alternative for the parent is to simply forgo the project. The model assumes that managers have better information than investors about the value of the subsidiary's assets-in-place as well as the assets-in-place in the rest of the corporation. Nanda's results indicate that parent firms with equity carve-outs are those firms that have been undervalued by the market. On the other hand, firms that issue equity at the parent level are those that have been overvalued by the market.

Klein et al. (1991) revisited Schipper and Smith's study to examine the carve-outs as a temporary form of asset restructuring. They find that most subsidiaries that were carved out before 1983 were either reacquired or divested by the parent. Their study focuses on the parent stock's combined price response to the announcement of an equity carve-out and to the subsequent second event. Their results indicate that the announcement of an equity carve-out followed later by the announcement of a complete sell-off of the subsidiary results in significant positive returns for parent stockholders. On the other hand, for the parent companies that reacquire their subsidiaries' shares, the combined parent stock response is insignificant.

Slovin et al. (1995) investigated the information conveyed by equity carve outs to that of spin-offs and asset sell-offs. The study examines the price effects on rivals of the subsidiaries and finds that rivals of equity carve-outs experience losses of about 1% of their market value. This evidence is in contrast to either positive or normal returns for rivals of subsidiaries that are spun off or sold off. Slovin et al. conclude that their results are consistent with the notion that managers initiate a carve-out when investors are likely to price the subsidiary's shares higher relative to the manager's perceived values.

Slovin and Sushka (1997) examined the share price effects on affiliated units resulting from seasoned equity offerings at both parent and subsidiary levels. In their sample of seasoned equity issuances by parent-controlled subsidiaries, the subsidiaries posted an average negative return of 4.1% while their parents earned significantly positive returns averaging 1.9%. In their sample of seasoned equity offerings by parents, parent firms sustained an average negative return of 2.7% while their corresponding subsidiaries earned an average positive return of 1.6%. They concluded that their findings support Nanda's (1991) results that equity offerings convey unfavorable information about the issuing firm and favorable information about the affiliated firm.

Allen and McConnell (1998) focused on the role of managerial discretion to explain the parent firms' stock returns around the announcement of an equity carve out. They adopted the view that an equity carve out is similar to an asset sale in that it reduces the dollar amount of assets under management's control. Since a manager's compensation is usually based on the size of the firm, Allen and McConnell argued that a manager will carve out a subsidiary to obtain funding only in cases in which the firm is limited in its ability to raise external capital. Consistent with this view, they found that parent firms with equity carve-outs are likely to be more highly leveraged and/or to have recently experienced poor earnings performance--both of which reduce the firm's ability to issue debt and/or equity capital in the parent firm. Furthermore, their results indicated that the parent firms' stock price response to news of an equity carve-out is greater when the funds are paid out to creditors or shareholders than when funds are retained within the firm; they attributed this difference to the agency costs of managerial discretion over the funds retained within the firm.

Allen and McConnell did not investigate whether their findings were associated with managers' intentions for the carved out subsidiaries. As Klein et al. (1991) indicated, carve-outs are often temporary arrangements. Generally, the notes to the financial statements will contain information concerning intentions to spin off or sell off the subsidiary. Furthermore, Allen and McConnell's predictions were based on the idea that an equity carve-out, like an asset sale, reduces the dollar amount of assets under the manager's control. However, over half of their sample consisted of parent firms that had retained at least 80% ownership in their "carved-out" subsidiary. Consolidation accounting rules require the reporting of the results of the operations and the financial position of a parent and its majority-owned subsidiaries as if the group were a single company.[1] Therefore, for much of their sample, managers' compensations will continue to be based on the subsidiaries that were carved out. In addition, over half of the parent firms in Allen and McConnell's sample had majority ownership in their subsidiary following the carve-out and, hence, they (and their managers) still had control over that subsidiary's assets. In many cases, the carve-out would have actually increased the dollar amount of assets under the manager's control due to the funds obtained in the offering.

There are two major differences between my study and the prior research on subsidiary stock offerings. First, I focus on the subsidiary stock transaction as an equity decision made by managers of the consolidated entity. I examine not only equity carve-outs but all subsidiary stock offerings in which the subsidiary was intended to be retained as part of the consolidated group.[2] Therefore, my sample does not include subsidiaries in which managers announced within six months of the offering their plans to divest or subsidiaries with parent's ownership below 50%.

---

[1] In SFAS No. 94, "Consolidation of All Majority Owned Subsidiaries," the FASB adopted the position that all majority-owned subsidiaries be included in consolidated statements. In addition, SFAS No. 94 reemphasized the FASB's basic position that parent company-only financial statements are unacceptable for general purpose distribution.

[2] My sample includes 11 seasoned stock offerings by subsidiaries.

Second, I examine the accounting implications of the transaction to determine whether managers used the gain from the subsidiary stock offering to manipulate earnings. In addition, I investigate whether the accounting gain played a role in the actual decision to issue stock at the subsidiary level. I use predictions from finance theory to draw conclusions concerning the relative importance of the gain in the decision to offer subsidiary stock.

CHAPTER 4
EARNINGS MANAGEMENT

The Potential for Earnings Management

There is general agreement among accounting practitioners, financial analysts and investors that corporate managers routinely engage in earnings management. This theme--that managers intentionally intervene in the financial reporting process to alter reported earnings--is often reflected in articles in the popular business press. For example, an article in a November 1994 issue of The Wall Street Journal suggested that earnings management is one reason that General Electric's earnings have risen every year for the past decade (Smith et al., 1994). This article further stated that companies tend to orchestrate the timing of gains and losses to smooth out bumps and to avoid a decline in reported income.

> Most companies do try to smooth profit growth. Walt Disney Co., for example, can decide when it wants profits from a videocassette re-release of "Snow White." Banks and insurance companies do a lot of smoothing by adjusting the level of their reserves, and many companies time write-offs carefully. (p. A1)

Recently critics have accused film producers in Hollywood of using "creative" accounting. An article in the December 31, 1995, issue of the Sunday newspaper insert Parade Magazine cites this as a reason why no one will ever know exactly how much Waterworld cost or lost (Scott, 1995). Only a few months earlier, writers and contributors had accused Paramount Pictures of manipulating accounting figures for the popular movie Forest Gump so as to minimize payments made on the basis of earnings. Paramount has reported over $50 million in losses on that movie as of

December 31 1984 For another movie Coming to America Art Buchwald is involved in a legal battle over the movie company s reported income Mr Buchwald stated on a May 25 1995 CNN Headline News broadcast Those bean counters know how to avoid showing a profit" (Vercammen 1995)

The idea that managers manipulate reported earnings is not inconceivable considering the overwhelming concern companies display over their reported income figures and given the media attention that unusually low (or high) earnings garner For example General Electric s Chairman Jack Welch has been vocal about his commitment to maintaining GE s reputation as being able to deliver strong consistent earnings growth in a myriad of global economic conditions" (Smith et al 1994)

The financial press generally cites opportunistic reasons for earnings management managers are likely to manipulate earnings numbers to increase their cash compensations and to protect their positions The New York Times states "Many corporate executives do not take their eye off quarterly results because their bonuses are pegged to near term jumps in earnings or stock prices (Greenhouse 1986 p 1) In an article in Fortune Magazine Abraham Briloff echoes Beidleman s theory (1973) that the stock market likes a smooth stream of predictable earnings increases (Worthy 1984) Briloff states "Reports that please stockholders serve the managers self interest" (p 51) Briloff goes on to say that managers devote so much attention to earnings because "it's their report card " His argument is that executives bonuses and perks are linked to reported earnings

The perceived need to manage earnings is not a new phenomenon but the pressure to generate good quarterly earnings is growing more intense One reason is that institutional money managers themselves accountable for yields on their funds account for over 80% of all trades Most have access to almost instantaneous financial data and often sell off stock literally moments after bad quarterly news is issued, driving stock prices down. Also, the merger fever of the 1980s has made managers worry that if their firms' earnings are weak, their stock prices will drop so much that their firms will become targets for acquisition (Greenhouse, 1986).

Survey data indicate that the practice of managing earnings may be quite common. In 1990, Bruns and Merchant surveyed managers in an attempt to determine their attitudes on earnings management. In general, their study revealed that managers had few ethical reservations about operating decision manipulations such as deferring necessary expenditures to a subsequent year. A 1994 survey of management accountants not only revealed similar attitudes, but the study also showed that accountants with more experience and higher positions in the organization are more tolerant of earnings management (Rosenzweig & Fischer, 1994). Similar findings are reported in yet another study on financial fraud published in the February 1996 issue of Business Ethics (Brief et al., 1996). The results show that 47% of top executives, 41% of controllers and 76% of graduate-level business students of the nearly 400 people surveyed were willing to commit fraud by understating write-offs that cut into their companies' profits.

While anecdotal evidence from the financial press supports the view that earnings are managed, the idea is not universally accepted in the academic world of accounting and finance. These researchers question whether earnings management can exist in an efficient market since it is unlikely that the market can be systematically fooled by such manipulations.

Stein (1989) developed a model to show that, even in a fully efficient market, such myopic behavior as window-dressing will exist. The basic idea of the model is similar to the simple game of the Prisoner's Dilemma. Managers inflate earnings in an attempt to influence the stock market. The market correctly conjectures that managers will engage in a certain amount of window-dressing and thus discounts inflated earnings. In effect, managers are trapped into manipulating earnings. Even though managers cannot fool the market, their best strategy is to continue to pump up earnings to compensate for the adjustments made by the market. If the market conjectures that earnings are not inflated, managers will still pump up earnings to fool the market.

Most empirical accounting research has assumed that managers use accounting methods to manipulate their firms' earnings. Recently, accounting studies have examined the notion of "real" earnings management (Schipper, 1989) obtained by adjusting production, financing, and investment decisions for the purpose of altering reported earnings. For example, since investments in research and development and advertising are expensed for financial statement purposes, managers may elect to postpone (accelerate) these expenditures with the intention of increasing (decreasing) current reported earnings (Holthausen, Larcker, & Sloan, 1995; Jones, 1988). A few researchers have examined the issue of real earnings manipulation in the context of asset sales and early debt retirements (Bartov, 1993; Hand, 1989; Hand et al., 1990). The findings of these studies suggest that managers use the accounting effects of these transactions to boost reported earnings and to reduce their leverage.

My study extends this line of accounting research by examining whether managers use the gain option of accounting for subsidiary stock offerings to manipulate their firms' reported earnings. In addition, I also investigate whether the accounting gain influences the manager's decision to undertake an equity offering at the subsidiary level. Unlike the other contexts under which real earnings management has been examined, I argue that managers are more likely to manipulate earnings because current accounting standards do not require gain recognition. Managers can choose to record the subsidiary stock transactions as adjustments to stockholders' equity on the balance sheet. Furthermore, in contrast to the extraordinary gains recognized from early debt retirements (Hand, 1989; Hand et al., 1990), the subsidiary stock offering gain is likely to be a more valuable vehicle for earnings management because it is included in Income from Continuing Operations. Ronen and Sadan (1981) suggest that investors use Income from Continuing Operations in their decision making.

The notion that subsidiary stock offering gains create a potential for income statement abuses has caused some concern in the investment community. For example, an article in the June 12, 1989, issue of Barrons referred to SAB No. 51 as an opportunity for managers to produce gains (Davis & Largay, 1989). Earlier, a 1984 Wall Street Journal article questioned ITT's application of this "controversial" rule to boost its reported income (Berton, 1984). Recently the business press cited two companies--Conseco and Thermo Electron--for their repeated use of subsidiary stock offering gains to boost their earnings (Norris, 1994). In the July, 1997, issue of CFO: The Magazine for Senior Financial Executives, financial analyst Jack Ciesielski refers to the frequent and significant stock transaction gains--often there are three or four different transactions in a single year--that have appeared on Thermo Electron's income statements. "The impact of gains from sale of equity stakes in subs is clearer at a company like Thermo Electron for which such gains almost take on the appearance of an operating segment" (Fink, 1997, p. 71).

These reports in the business press are not without merit. Public statements made by managers confirm the presses' concerns that earnings management is likely to play a role in the accounting for the stock offering and perhaps in the actual decision to issue the stock. In its 1993 annual report, Utilicorp indicated that the gain from the offering by Aquila Energy (its subsidiary) "provided an opportunity to implement a new strategic plan at Aquila Energy without adversely affecting 1993 earnings " According to a note in its December 31 1990 annual report Chemed Corporation (a company that is represented in this study by two subsidiary stock offerings) views subsidiary stock offerings as a potential means of providing cash and generating profit " In its comment letter on the Exposure Draft "Consolidated Financial Statements Policy and Procedures " Enron Corporation a company represented in my study by three subsidiary offerings addressed the "economic harm" that their shareholders could experience under the current proposal The following is an excerpt from the Enron letter the complete letter can be found in the appendix

> To the extent that ARB 51 gains are deleted from net income in the future it is logical that the trading price of Enron's common stock will be lower than it otherwise would be including the gains In Enron's case the majority of the analysts who report on our stock consider these gains as recurring net income However we believe that such gains will be ignored by these same analysts for valuation purposes to the extent the gains are omitted from reported income (Thompkins 1996)

Incentives for Managers to Manipulate Reported Earnings

Previous studies have tested hypotheses that managers make accounting as well as investment and financing decisions to maximize their wealth which is a function of accounting-based contracting variables Contracting incentives generally induce managers to select income-increasing accounting procedures I extend this literature by designing tests to determine whether similar incentives motivate managers to use subsidiary stock issuances to increase earnings

Compensation and Incentives to Increase Earnings

Based on the seminal work by Watts and Zimmerman (1978) numerous studies have argued that managers have a pecuniary interest in the level of reported earnings

Generally these studies have examined the extent to which managers manipulate earnings to maximize the present value of explicit accounting-based compensation schemes Even in the absence of explicit compensation plans executive salaries are likely to be based on informal agreements which reward higher levels of reported earnings

While the relationship between compensation and reported earnings is predicted to influence the decisions of most managers the emphasis on earnings is expected to be especially significant for firms experiencing mediocre performance (Healy 1985 Holthausen et al 1995 Gaver Gaver & Austin 1995) Furthermore extremely poor performance is likely to cause managers to be concerned with loss of their jobs Weisbach (1988) finds that executives are likely to lose their positions when reported earnings are below those of the previous years

The emphasis on earnings for compensation and job retention creates incentives for managers to avoid reporting earnings below the level of the prior year If decreases must be reported managers are expected to reduce the extent of the decline This line of reasoning is consistent with the evidence cited by Balsam Haw and Lilien (1995) that managers adopt mandated income-increasing accounting changes when ROA was lower than that of the previous year This leads to the following hypothesis (all hypotheses are stated in the alternative form)

$H1_{Cd}$ *Firms use gains from subsidiary stock offerings to offset a decline in earnings*

In testing this hypothesis I examine changes in both operating income and net income Managers may manipulate operating income if their firms experienced a transient shortfall in operating returns Even if the operating returns had not declined managers may still have used the gains to offset discretionary nonrecurring nonoperating items This action can be inferred by examining both operating income and net income If net income declines without a corresponding decline in operating income then one may infer that managers used their discretion to time the recognition of loss items to occur in the same period that the subsidiary stock offering gain was recognized.

Debt and Incentives to Increase Earnings

Public and private debt agreements contain covenants to restrict managers from taking actions that may negatively impact the value of debtholders claims Smith and Wemer (1979) and Leftwich (1980) provided evidence to indicate that lending agreements generally rely on accounting numbers prepared according to GAAP to restrict the acts of managers According to Cestle (1980) covenants commonly include constraints based on leverage working capital net worth and dividend payout. Any breach of these constraints constitutes technical default which gives lenders the option to exercise their contractual rights to modify the terms of the lending agreement or to terminate the loan Lenders actions have the potential to impose significant restructuring and refinancing costs on the borrowing firm To the extent that managers are constrained by accounting-based covenants managers are expected to make income- increasing decisions to reduce the likelihood of default and to avoid the potential costs due to covenant violations

To obtain evidence on the importance of debt agreements in determining accounting policy accounting researchers commonly follow the practice of using leverage as a proxy for the existence and closeness of accounting-based constraints Recent studies provide evidence consistent with measures of leverage being associated with the existence and closeness to some accounting-based covenant restrictions (Duke & Hunt, 1990; Press & Weintrop, 1990). Christie (1990) documented support for the use of the debt-equity ratio as a proxy for closeness of covenant constraints. He found the larger the ratio, the greater the likelihood that managers select accounting procedures that shift reported earnings from future periods to the current period.

In addition to the results documenting an association between leverage and accounting policy, there is evidence to indicate that leverage plays a significant role in operational decisions. Jensen (1989) suggested that firms with more leverage will respond quicker operationally than those with less leverage as firm value falls because even a small reduction in value can result in bankruptcy. Ofek (1993) studied the reaction of 358 firms to a period of short term distress (defined as a year of average or above-average performance followed by a year of very poor performance). His results indicated that higher leveraged firms are more likely to make operational decisions--e.g., liquidate assets, consolidate production facilities, discontinue operations--in response to short-term operational distress.

This study extends the research on leverage by examining whether a firm's leverage characteristics before the subsidiary stock offering are related to its decision to issue stock at the subsidiary level. Since current accounting policies allow gains to be recognized on subsidiary stock transactions, firms can use the subsidiary offerings to boost earnings and net worth, reducing the likelihood of violating the accounting-based provisions of debt covenants. Assuming the appropriateness of leverage as a proxy for the tightness of debt covenant constraints, I test the following hypothesis:

$H2_{alt}$: *Parents with subsidiary stock offerings have increases in leverage in the period prior to the year of the subsidiary stock offering.*

Accounting Alternatives for Earnings Management

Managers can affect reported income by selecting accounting methods within GAAP or by timing production and investment transactions. Use of the former is likely to be preferred since it is rather easy to accomplish and difficult for an outsider to detect. In spite of the high visibility of subsidiary stock transactions, managers may still use the gain recognition option to increase earnings if they have relatively few income increasing accounting alternatives available. DeFond and Jiambalvo (1991) find that firms which made overstatement errors had already taken advantage of available income-increasing GAAP alternatives.

Ideally, the magnitude of managers' discretionary accounting choices should be measured as the difference between reported earnings and the earnings that would have been reported absent managers' discretionary accounting decisions. Since that quantity is unobservable, I follow prior research and focus on discretionary accruals as proxies for managers' discretionary accounting choices. I use two different estimates of discretionary accruals: (1) total accruals used by Healy (1985) and (2) the first difference in total accruals used by DeAngelo (1986). Healy's measure of total accruals has an advantage in that the measure potentially incorporates the effects of accounting increasing estimates and other more subtle earnings manipulations (Jones 1988). Consistent with prior research, I define total accruals (TA) as follows. Compustat data items are indicated in parentheses.

$$TA = [\Delta \text{ Current Assets } (4) - \Delta \text{ Cash } (1)] - [\Delta \text{ Current Liabilities } (5) - \Delta \text{ Current Maturities of Long Term Debt } (44)] - \text{Depreciation and Amortization Expense } (14)$$

The change (Δ) is computed between time t and time t-1.

In addition to accounting choices managers production and investment decisions may be affected by their reporting objectives (Jones 1988 Holthausen et al 1995) For example GAAP requires expenditures on research and development and advertising to be expensed when incurred Postponing either expenditure will result in increases in current income assuming there are no immediate offsetting effects on revenues To the extent capital expenditures result in increased depreciation charges managers can also boost income by reducing those expenditures Thus managers who use subsidiary stock transaction gains to manipulate earnings would also have incentives to postpone research and development advertising and capital expenditures to the extent there are no immediate offsetting effects on sales and other operations I use a univariate analysis to examine the one year change in the level of spending for these discretionary items--calculated from the year before to the year of the offer If parent firms used discretionary items to manage earnings then there should be a significant decline in expenditures in the year of the stock offering

Managers can also alter reported earnings through the timing of nonrecurring charges such as restructuring charges or the write off or sale of assets They have considerable discretion regarding the dollar amount recognized as well as when and if these transactions occur For example Elliott and Shaw (1988) found that write-offs tend to be disclosed in the fourth quarter and often significantly after the asset impairment. Furthermore Bartov (1993) reports that asset sales are timed to smooth earnings and to mitigate accounting-based debt covenant constraints

Casual observations suggest managers can use "gain items" to offset the effects of "loss items" For example an article in the November 3 1994 issue of The Wall Street Journal reports that in six of the years since 1983 GE has used gains from asset and equity sales to offset restructuring charges of roughly equal size (Pulliam &

Berton 1994) In the November 12 1990 issue of Forbes Bernard Picchi petroleum analyst at Solomon Brothers stated that often when a major oil company recognizes a nonoperating gain it tends to offset those profits with nonrecurring charges (i e charges for future environmental clean-up) (Linden 1990) The implications are that parent firms may use gains from subsidiary stock issuances to offset nonrecurring transactions in the same period This study examines Special Items Discontinued Operations Extraordinary Items and Nonoperating Income (Expense)- Compustat items #17 66 192 and 190 respectively for evidence to suggest that gains from subsidiary stock transactions are used to offset income-decreasing nonrecurring items

The above discussion leads to the following hypothesis

H3A$_{EM}$ *Parents that recognized gains on subsidiary stock offers have income increasing accounting accruals and decreased level of discretionary expenditures*

H3B$_{EM}$ *Parents that recognize gains from subsidiary stock offers have greater income-decreasing nonrecurring items than in the prior year*

CHAPTER 5
CORPORATE FINANCE THEORY

A number of empirical studies in corporate finance have investigated stock price behavior in the period surrounding equity offerings. This research has documented, on average, a significant reduction in stock prices associated with the announcement of a new equity offering (Asquith & Mullins, 1986; Dann & Mikkelson, 1984; Masulis & Korwar, 1986). Furthermore, Spiess and Affleck-Graves (1995) and Loughran and Ritter (1995) found evidence that issuing firms have lower stock returns than nonissuing firms for several years following a stock offering.

These results have been replicated in all but one form of equity financing: the sale of equity in a controlled subsidiary. While announcements of public offerings of parent equity are associated with average abnormal losses, Schipper and Smith (1986) document average abnormal gains for parent firm shareholders when an initial public offering in a subsidiary is announced. Similarly, Slovin and Sushka (1997) provide evidence of a positive wealth effect on parents when their controlled subsidiaries issue seasoned equity.

Researchers have developed a number of theoretical models to explain the stock price behavior in the periods surrounding an equity offer. The models generally assume that managers are better informed than investors and act in the best interests of their firm's current shareholders. The basic premise of these models is that managers' decisions to issue equity convey new information to investors about their firms' prospects. The nature of the information revealed by equity offers varies according to the analysis but the focus is generally on overvalued shares earnings prospects or the quality of investment opportunities

Overvaluation Hypothesis

In his seminal paper on the economics of asymmetric information Akerlof (1970) showed how markets can break down when the buyer cannot verify the quality of the product offered for sale (the "lemons" problem) Since there is a possibility of buying a lemon the buyer will discount the price he offers the seller Myers and Majluf (1984) extended Akerlof's idea to security issues to explain the price drop when a stock offering is announced They assumed that managers are better informed than investors about the value of the firm and that they act in the interest of existing shareholders Their analysis suggested that managers have an incentive to issue new equity when their firm has been overvalued by the market Recognizing managers incentives investors interpret a stock offering as unfavorable news about the value of the firm which results in a decline in the firm s stock price when an equity offering is announced

Somewhat compatible with Myers and Majluf's bad news story Lucas and McDonald (1991) developed the project arrival theory to explain the extended price rise preceding a stock offering Their model made the following basic assumptions (1) managers have superior information (2) delaying an equity offering lowers the net present value of the firm s projects and (3) the market is efficient, but individual firm shares may be occasionally mispriced As new information about the profitability of firms investments reaches the market, the share price of undervalued firms tends to increase while the share price of overvalued firms tends to decline Their analysis suggested that firms are more likely to issue stock if their returns before the issue are high

The predictions of the overvaluation hypothesis are consistent with empirical findings In a recent study Korajczyk Lucas and McDonald (1990) reported cumulative excess returns of 43.8% and 68.8% for AMEX/NYSE and OTC firms respectively for primary and combined primary and secondary issues in the 500 days prior to the issue announcement. These results are similar to those documented in earlier studies that firms tend to issue equity after a rise in stock prices (Marsh 1979 Taggart,1977)

In the case of subsidiary stock offerings Nanda (1991) demonstrated that the Myers and Majluf framework can be used to explain the average positive returns to parent stockholders at the announcement of a subsidiary stock offering His analysis yields conclusions compatible with Myers and Majluf's overvaluation hypothesis Managers who believe that the parent is undervalued will choose to issue unseasoned equity in the subsidiary rather than issue at the parent level Nanda's results imply that a subsidiary offering reveals unfavorable news that the subsidiary is being overvalued by the market Empirical evidence reported by Slovin and Sushka (1997) suggested that Nanda's predictions also extend to seasoned equity offerings by subsidiaries

The above discussion leads to the following version of the overvaluation hypothesis as it relates to subsidiary stock offerings

$H4_{OF}$ *Parent firms that issue equity at the subsidiary (parent) level are on average undervalued (overvalued) by the market In the period prior to the subsidiary offering parent firms with subsidiary offers will have lower returns on average than parent companies that issue their own stock*

Earnings Prospects Hypothesis

The overvaluation hypothesis suggests that managers will try to issue stock when the shares are overvalued. This implies that managers know more than investors about the net present value of the firm's future and current projects. If managers know that their firms' future cash flows (and, hence, earnings) will be lower than expected, they have incentives to issue shares before stockholders realize the shares are overvalued and before cash flows decline. Thus, given the positive relationship between cash flows and earnings, managers are likely to choose to issue in a very high earnings year when the stock is at its peak based on earnings.

Recent empirical research documents the association between earnings levels (and changes) and the decision to issue equity. Crutchley et al. (Winter 1994/1995) found evidence to suggest that managers appear to announce equity issues when their firms' earnings have been increasing and are at their peak. Similarly, Patel et al. (1993) found that firms issue common stock during periods of relatively high earnings performance and prior to an extended period of substantial earnings declines. Hansen and Crutchley (1990) reported similar results that firms issue common equity in advance of a significant (and long term) downturn in earnings.

With respect to subsidiary stock offerings, Nanda's findings that subsidiary stock-issuing parents are undervalued provides a basis for my inferences concerning their earnings. His undervaluation result suggests that in the year of the subsidiary stock offering, parent firms do not exhibit high earnings performance. In particular, Nanda's findings suggest that in the year of the subsidiary stock offering, parents with subsidiary offerings do not experience the large relative increases in earnings that are characteristic of firms that issue their own equity. This leads to the following hypothesis:

$H5_{CF}$: *Parent firms with subsidiary stock offerings will have smaller increases in earnings than parent firms that issue their own equity.*

The predictions of the earnings prospects hypothesis are similar to the predictions of the earnings management hypothesis. Both hypotheses predict that the subsidiary-stock offering parents will have smaller changes in earnings than parents that issue their own equity. However, the earnings management hypothesis predicts that parents with subsidiary stock offerings will actually have decreases (negative changes) in earnings.

To examine the earnings prospects hypothesis I focus on operating earnings--the level of earnings before special items. "Earnings before special items" is often emphasized by analysts. Value Line discusses "earnings before special items" rather than net income (Elliott & Hanna, 1996). Significant results on the change in operating income could be consistent with both the earnings management and earnings prospects hypotheses. Interpretation of the findings will be based on the results of the tests on the other variables from earnings management and corporate finance theory.

Investment Opportunities and Stock Offerings

In general, models of information asymmetry suggest that the market may interpret an equity offering more favorably for firms with characteristics that lead investors to believe the offering is not motivated by negative information about the firm's prospects. In Jensen's (1986) model, the announcement effect of an equity offering is contingent on the market's expectations that the proceeds will be invested in positive net present value projects. His analysis predicted that the market reaction to equity issuances will be positive for high-growth firms and negative for low-growth firms. Furthermore, Jensen argued that debt payments drain the firm of its cash balances preventing investment in profitable projects The model implied that the market would expect firms with profitable investment opportunities to finance more with equity and to have lower levels of leverage

Ambarish John and Williams (1987) reach similar conclusions Their model suggests that the market reaction to a new equity offering is related to whether managers superior information is due mainly to assets in place or to investment opportunities They predict the market reaction will be negative in the former case and positive in the latter These findings are consistent with results reported by Cooney and Kalay (1993) who argued that the information effect of an equity offering could be positive if the market anticipates the issuing firm has a valuable new project For example a decision to issue new equity accompanied by high levels of capital spending could signal the presence of strong investment opportunities and would be welcomed by the market.

Empirical research of the effect of growth opportunities on the market reaction to equity offers yields mixed results Using the firm s Tobin s q ratio as a proxy for the profitability of the firm s investments Barclay and Litzenberger (1988) found no statistical relationship between the market reaction and the firm s investment opportunities On the other hand Pilotte (1992) found that the market response is positively related to a number of growth opportunity measures but the price response for his growth firm sample was not significantly positive Similar results were reported by Denis (1994) who documented a positive relation between several measures of growth opportunities and the stock price reaction to equity offers but his results were driven by a small subset of young high-growth firms Jung Kim and Stulz (1996) found a positive relation between stock price reactions and market to-book ratio (often used as a proxy for investment opportunities) but, similar to findings by Pilotte, the mean abnormal return for even the highest market-to-book decile was still negative.

There is some empirical support for a relationship between investment opportunities and the decision to issue equity. Smith and Watts (1992) documented a negative relationship between investment opportunities and leverage, while Titman and Wessels (1988) reported a negative relationship between R&D and leverage. Korajczyk et al. (1990) found that, on average, firms issuing equity have increases in Tobin's q prior to the issue and decreases following the issue. They viewed the increase in Tobin's q as an indication that firms issue equity to finance growth opportunities. After the project is undertaken, the ratio of growth opportunities to assets in place declines.

Asymmetric information models do not specifically address the relationship between investment opportunities and subsidiary stock offerings. However, there is empirical support for the notion that managers issue stock at the subsidiary level to fund investment opportunities in the subsidiary at a time when the parent is likely to be viewed by the market as lacking profitable investments. Slovin and Sushka (1997) found that, over the year prior to a seasoned subsidiary stock offering, the parent firm underperforms the stock market while the subsidiary outperforms the market. Based on the Lucas and McDonald's (1991) project arrival theory, the subsidiary's price rise preceding a stock offering is consistent with an improvement in the subsidiary's investment opportunities. The theory suggests that the underperformance of parent company stock is related to the negative assessment by the market concerning the profitability of the parent's investment opportunities.

According to Jensen (1988), the stock price reaction to announcements of equity offerings is contingent on the market's assessment of the value of the issuing entity's investment opportunities. Schipper and Smith (1986) suggest that investors can evaluate more easily subsidiary growth opportunities when they are isolated ("carved out") from the rest of the corporation. Thus, stock issuance at the subsidiary level may allow managers to minimize the negative information effect associated with an equity offering by obtaining separate financing for new projects. Based on a survey of CEOs, Anslinger, Carey, Fink, and Gagnon (1997) found that equity carve-outs are an effective way for companies to fund growth opportunities. Many of the CEOs participating in their survey believed that their subsidiary could offer stock at more attractive prices.

This discussion leads to the following hypotheses:

H6$_{CF}$ *Parent firms with subsidiary stock offerings have less profitable investment opportunities than parent firms that issue their own stock.*

H7$_{CF}$ *Parent firms with subsidiary stock offers have higher levels of leverage than parent firms that issue their own stock.*[1]

---

[1] The earnings management hypothesis predicts that parents with subsidiary stock offerings have higher and increasing levels of leverage in the years prior to the subsidiary offering.

CHAPTER 6
EMPIRICAL METHOD

Research Design

The first part of the analysis is a univariate examination of the parents that issued stock at the subsidiary level. I compare them to two different control samples which I describe in the next section. I test separately the predictions of the earnings management and financial theory hypotheses using both parametric and nonparametric tests. In the second part of the analysis I develop an empirical model of equity issue choice that I assume to be a joint function of earnings management and financial theory variables. Its results can be used to test the relative importance of the variables in characterizing firms that issue equity.

The related joint prediction model can be described as follows. Let Y denote a dependent dummy variable that takes a value of 1 for parents that issue equity at the subsidiary level and 0 for parents that issue their own equity. Thus P(Y =1) is the conditional probability that company i will issue equity at the subsidiary level, given that it will make an issue of equity at either the subsidiary or parent level. The explanatory variables are represented by $x_1, x_2, x_3, \ldots, x_n$. I assume the model of choice between parent and subsidiary equity takes the following form:

$$\begin{aligned} P(Y = 1 \mid x_1, x_2, x_3, \ldots, x_n) &= F(B_1 x_1 + B_2 x_2 + B_3 x_3 + \ldots + B_n x_n) \\ &= F(x'B) \end{aligned}$$

I estimate this model using logistic regression. In the first analysis, I allow to enter into the model all of the variables that have been identified from prior research on the security issue decision. The subsequent analyses include only those variables considered to be significant based on the results of the univariate tests. Each of the estimations are completed using the full sample of subsidiary stock offers. A second round of estimations is conducted on a somewhat reduced sample of offerings after removing financial institutions and utilities.

Sample Selection

I used various libraries (company, NAARS, and news) from the Lexis/Nexis data base as the basic reference source for collecting my sample of subsidiary stock offerings. Using a number of different "key words," I searched files within those libraries to identify subsidiary stock issuances occurring during the period 1983-1994. Since I am interested in subsidiary stock transactions for which gain recognition was an option, my search was designed to include offerings occurring since 1983. The search procedure provided numerous articles, SEC filings, and annual statements that I read to determine whether the transactions contained a public stock offering by a consolidated subsidiary that met the following sample selection criteria:

1. The parent firm had a controlling interest in its issuing subsidiary and continued to consolidate the subsidiary in the period following the offering. In most cases, I followed ARB 51's general rule of ownership of at least 50% of the subsidiary as a condition indicative of consolidation.[1]

---

[1] The only exception is Conseco, whose ownership of subsidiary Bankers Life was reduced below 50% when the subsidiary stock was issued. Within 7 months, Conseco had brought its ownership back up to above the 50% level by repurchasing Bankers shares.

2 There was no mention of an intention to divest or spin off the subsidiary in the news reports at the time of the offering or in the notes to the first annual financial statement published following the offering

3 Information on both parent and subsidiary firms can be found on the CRSP and Compustat data tapes

4 Both parent and subsidiary are domestic entities

It was a formidable task to identify a sample of stock issuances that met the criteria listed above and to gather information pertaining to the accounting method used the amount of the gain recognized (if any) tax provided the percentage of subsidiary stock retained by the parent and the reason given for the offering I used the sum of the gains on the multiple offerings for a given parent in any one year My final sample of subsidiary offerings contains 108 public offerings by subsidiaries involving 78 parents

I selected two control samples The first is an industry matched sample of parents that I used solely in the univariate tests of the earnings management hypothesis This control sample consists of a group of firms randomly selected from the same Compustat 4 digit SIC category as that of the firms in the subsidiary-issuing parent sample My procedure was to select the first four firms (as available) within each parent firm SIC category and for which data were available for the relevant year Using the firms selected I calculated the means of the relevant financial variables within each SIC category that were then paired with the corresponding value for each parent having the same SIC The industry average is assumed to proxy for the expected values of the various financial variables A significant difference between the parent's value and the industry average can then be attributed to the decision to issue stock at the subsidiary level The purpose of the industry control sample is to provide a check on the results reported from the earnings management tests in which the parents serve as their own controls Comparison of statistics between the subsidiary issuing parents and the industry sample should provide evidence that results of the initial tests (using parents as their own controls) are not driven by some special feature in the subsidiary issuing parent sample

The second control sample consists of 210 parent firms that issued equity at the parent level rather than the subsidiary level I use this sample both in the univariate tests of the predictions from corporate finance theory and in the multivariate tests of equity choice I selected these firms in two steps

1 I searched the Investment Dealers Digest for information on primary seasoned equity offerings occurring during the years 1983-1994

2 I searched the notes to the financial statements and news reports to select for inclusion in the sample only the equity offerings made by parent firms

Table 6-1 contains a listing of parents with their corresponding subsidiaries the month and year of the offering and the gain as a percent of adjusted net income

Descriptive Statistics

Table 6-1 contains a list of parents with their subsidiaries and the corresponding subsidiary stock transaction gain expressed as a percentage of adjusted net income The sample includes 19 parents that had multiple subsidiary offerings and 14 parents that did not recognize any gain on their subsidiary stock transactions For 35 offerings the gain was larger than the absolute value of the parents net income or net loss If the recognition of gains had not been allowed 28 of the parent firms would have reported a net loss for the period

Table 6-1 Parents and Subsidiaries

Parent Company	Subsidiary Company	Offer Mo	Offer Yr	Gain as % of Adjusted Net Income[a]
Air & Water Tech -Cl A	Metcalf & Eddy Cos Inc	10	88	-39 49[b]
Air & Water Tech -Cl A	Metcalf & Eddy Cos Inc	7	89	86 69[b]
Amax Inc	Amax Gold Inc	7	87	122 38[b]
American Express	First Data Resources Inc	9	83	5 1
American Express	Shearson Lehman Bros Hldg	5	87	80 07
American Express	First Data Corp	4	92	1180 56
American Maize-prods -CL A	American Fructose -CL A	8	84	168 01
American Recreatn Centrs Inc	Right Start Inc	10	91	-155 00[a]
Atlantic Richfield Co	Arco Chemical Co	10	87	1 53
Atlantic Richfield Co	Vastar Resources Inc	7	94	41 60
Bergen Brunswig Corp -CL A	Commtron Corp -CL A	7	86	214 81
BMA Corp	Labone Inc	7	87	-426 86[a]
C3 Inc -CL A	Tempest Technologies Inc	9	89	20 36[a]
Cabot Corp	Cabot Oil & Gas Corp -CL A	2	90	102 77
Catalyst Energy Corp	United Thermal Corp	8	87	40714 29
Chemed Corp	Roto Rooter Inc	6	85	46 13
Chemed Corp	National Sanitary Supply Co	6	86	5 02
Citicorp	Student Loan Mktg	12	92	6 56
Conseco Inc	CCP Insurance Inc	7	92	7 01
Conseco Inc	Bankers Life Hldg Corp	3	93	38 79
Contel Corp	Contel Cellular Inc	4	86	18 45
Dart Group Corp -CL A	Trak Auto Corp	4	83	121 30
Dole Food Co Inc	Castle & Cooke Homes Inc	3	93	85 41
Dow Chemical	Destec Energy Inc	3	91	29 22
Emerson Radio	Cardiac Resuscitator Corp	11	82	-189 59[a]
Enron Corp	Enron Oil & Gas	10	88	89 86
Enron Corp	Enron Oil & Gas	8	92	24 37
Enron Corp	Enron Global Pwr & Pipelines	11	94	16 73
Enster Group Inc	Kinder care Learning Centers	8	88	199 06

Table 6-1 continued

Parent Company	Subsidiary Company	Offer Mo	Offer Yr	Gain as % of Adjusted Net Income[a]
ERC International Inc	ERC Environmental & Energy	12	88	25.86
First Mississippi Corp	Getchell Gold Corp	5	88	104.57
Fleet Financial Group Inc	Fleet Mtg Group Inc	5	92	76.18
Florida Gaming Corp	Sports-Tech International	6	89	0.00[c]
FMC Corp	Meridian Gold Inc	6	87	110.33
Foxmeyer Health Corp	Foxmeyer Corp	8	91	0.00[c]
Genzyme Corp	IG Laboratories Inc	5	90	20.98
Genzyme Corp	Genzyme Transgenics Corp	7	93	0.00[c]
Gold Kist Inc	Golden Poultry Co Inc	8	86	6.89
Great American Mgmt & Invt	Falcon Bldg Prods Inc CL A	11	94	-504.86
Griffon Corp	Oneita Industries Inc	7	89	0.00[c]
Griffon Corp	Oneita Industries Inc	9	89	0.00[c]
Healthdyne Inc	Home Nutritional Svcs Inc	12	89	118.58[b]
Healthdyne Inc	Healthdyne Technologies Inc	6	83	-1082.00[b]
Helm Resources Inc	Intersystems Inc/de	2	87	138.80
ICN Pharmaceuticals--Old	ICN Biomedicals Inc	6	86	4.75
ICN Pharmaceuticals--Old	Viratek Inc	6	81	-124.47[b]
ICN Pharmaceuticals--Old	Viratek Inc	8	92	34.67[b]
Insilco Corp	Times Fiber Communications	2	83	48.77
Intel Corp	Antec Corp	5	94	1.03
IU International Corp	Envirosafe Services Inc	5	87	144.07
Jefferies Group Inc	Investment Technology Gp Inc	7	94	68.81
Jewelcor Inc	Gruen Marketing Corp	8	86	-1108.56[b]
Kansas City Southern Inds	DST Systems Inc	3	83	0.00[c]
Kimmins Corp	Transcor Waste Svcs Inc	3	83	83.95
Manor Care Inc	Vitalink Pharmacy Svcs Inc	3	92	43.07
Maxco Inc	Meder Inc	8	83	-180.15[b]
Maxco Inc	Finishmaster Inc	2	94	609.26
Maxxam Inc	Kaiser Aluminum Corp	7	91	0.00[c]

Table 6-1--continued

Parent Company	Subsidiary Company	Offer Mo	 Yr	Gain as % of Adjusted Net Income[a]
Mckesson Corp	Armor All Products Corp	10	86	0.00[f]
Medco Containment Svcs Inc	Synetic Inc	6	89	47.00
Medco Containment Svcs Inc	Medical Marketing Group Inc	3	91	70.74
Medicore Inc	Techdyne Inc	4	85	-688.52
Morrison Knudsen Corp	MK Rail Corp	5	94	-6.42
National Education Corp	Steck-Vaughn Publishing cp	7	93	-68.89
Nationwide Cellular Svc Inc	Cellular Technical Services	8	91	-245.68
Natl Patent Develpmnt	Intl Hydron Corp	10	83	123.09
Natl Patent Develpmnt	GTS Duratek Inc	2	86	16.55
Niches Inc	Body Drama Inc	10	91	105.03
Noel Group Inc	Simmons Outdoor Corp	8	93	0.00
Noel Group Inc	Lincoln Snacks Co	1	94	0.00
Noram Energy Corp	Arkla Exploration Co	12	89	39.36
North Star Universal Inc	Michael Foods Inc	5	87	0.00
Ogden Corp	Ogden Projects Inc	8	89	61.82
Ogden Corp	Ogden Projects Inc	5	90	81.48
OHM Corp	NSC Corp	6	90	280.07
Perkin-Elmer Corp	Concurrent Computer Corp	1	86	6.36
Pier 1 Imports Inc/de	Sunbelt Nursery Grp/de	10	91	28.25
Primerica Corp--Old	Musicland Stores Corp	2	87	8.29
Schuller Corp	Riverwood Intl Corp	6	92	223.32
Sears Roebuck & Co	SPS Transaction Services Inc	3	92	-0.81
Sears Roebuck & Co	Allstate Corp	4	93	36.51
Smithkline Beckman Corp	Beckman Instruments Inc	10	88	25.18
Southmark Corp	Evergreen Healthcare	3	87	63.28
Standard Havens--CL A	BHA Group Inc	11	87	209.01
Summit Health Ltd	Summit Care Corp	3	92	8.35
Telephone & Data	US Cellular Corp	5	88	0.00
Telephone & Data	American Paging Inc	2	94	0.00

Table 6-1--continued

Parent Company	Subsidiary Company	Offer Mo	Offer Yr	Gain as % of Adjusted Net Income[a]
Terex Corp	Fruehauf Trailer Corp	7	91	-27.32
Textron Inc	Paul Revere Corp	10	93	0.00
Thermo Electron Corp	Thermedics Inc	8	83	101.06
Thermo Electron Corp	Thermo Instrument Systems	8	86	78.11
Thermo Electron Corp	Thermo Power Corp	8	87	106.28
Thermo Electron Corp	Thermo Cardiosystems	6	89	5.60
Thermo Electron Corp	Thermo Cardiosystems	8	90	8.42
Thermo Electron Corp	Thermotrex Corp	7	91	51.04
Thermo Electron Corp	Thermo Fibertek Inc	6	92	64.93
Thermo Electron Corp	Thermedics Inc	6	93	49.67
Thermo Electron Corp	Thermolase Corp	7	94	18.99
TJX Companies Inc	TJX Companies Inc--Old	6	87	782.83[b]
TPI Enterprises Inc	Triboro Communications Inc	5	84	97.4
Union Camp Corp	Bush Boake Allen Inc	5	94	44.03
United Merchants & Mfrs	Victoria Creations Inc	3	88	-28.84[b]
Utilicorp United Inc	Aquila Gas Pipeline Corp	10	93	125.00
Valmont Industries	Inacom Corp	9	87	72.63
Wackenhut Corp--Series	Wackenhut Corrections Corp	7	94	0.00[c]
WMX Technologies Inc	Chemical Waste Management	10	86	170.89
WMX Technologies Inc	Chemical Waste Management	10	89	14.41
WMX Technologies Inc	Rust International Inc	8	93	3.45

[a] Adjusted net income is reported net income reduced by the gain (net of any tax effect)

[b] Negative percentages reflect a net loss for the period

[c] 0 percent indicates no gain recognized

Table 6-2 reports descriptive statistics on the complete sample of parents and subsidiaries. As expected, the parents are much larger than the subsidiaries. Their mean and median statistics for both assets and sales are several times greater than the corresponding statistics of the subsidiaries. The disparity in size is likely to be a major factor in the wide spread in net income between the two groups. The subsidiaries' median price/earnings ratio and Tobin's q are somewhat larger than those of the parents, which suggests the subsidiaries had relatively more growth opportunities.

Table 6-2 Descriptive Statistics for Parents and Their Subsidiaries. The sample includes 78 different parent firms and 100 different subsidiaries with a total of 108 subsidiary offerings. Assets, Sales, and Net Income figures are in millions of dollars.

	Parents		Subsidiaries	
	Mean	Median	Mean	Median
Assets	9920.68	779.06	2074.69	78.90
Sales	3,679.84	739.24	586.85	89.69
Net Income	111.50	27.68	37.84	4.81
Price/Earnings	29.88	14.08	2.00	16.15
Tobin's Q	1.37	1.21	2.71	1.85

Table 6-3 provides a comparison of summary statistics for the 94 parents that recognized gains and the 14 parents that did not recognize gains on their subsidiary stock transactions. Based on the level of both assets and sales, the parents that recognized gains were larger companies. They had larger levels of liabilities and net income, which is not surprising given their relative size. In the year of the subsidiary stock offering, over half of the companies in both groups had decreases in the ratio of net income to lagged assets. The statistics indicate that parents with subsidiary stock gains had increases in leverage (measured as the ratio of liabilities to assets) in the two-year period prior to the subsidiary stock offering. This contrasts with the decreases in leverage for parents that did not recognize gains on their subsidiary stock offerings.

Table 6-3 Comparison of Parents Recognizing Gains to Parents Not Recognizing Gains

	Parents With Gains (N = 94)		Parents Without Gains (N = 14)	
	Mean	Median	Mean	Median
Assets*	11227.350	898.771	1147.310	569.846
Liabilities*	9865.639	634.030	770.757	312.548
Sales*	4034.949	794.838	1285.504	404.974
Net Income*	78.725	3.649	16.691	8.842
Net Income/Assets One-Year Change	-0.022	0.008	0.002	0.005
Liabilities/Assets Two-Year Change	0.067	0.032	0.007	-0.056

* Figures are in millions of dollars

Table 6-4 presents statistics on earnings performance (both operating income and net income) for the sample of parents with subsidiary offerings and an industry matched sample for the year before and the year of the offering. Based on the p-values, there is no significant difference in the operating income (scaled by lagged assets) of the two samples in either year. This suggests that the operating results of parents with subsidiary offers were comparable to those of their industry peers. These findings do not agree with Allen and McConnell's results (1998) that the operating performance is significantly lower for parents with equity carve outs than for their industry peers. The conflicting results are likely due to my sample selection criteria which are based on the motivation for the study, an examination of offerings by consolidated subsidiaries. Allen and McConnell examined only equity carve-outs, and they do not exclude subsidiaries on the basis of low ownership percentage (less than 50%) or the parent's intent to divest the subsidiary.

Table 6-4 Earnings Statistics (Scaled by Lagged Assets) for Year Before and Year of Offer for Parents with Gains from Subsidiary Offers and an Industry Matched Sample The parametric p-value is the two-tailed significance level under a t-test for comparison of means The nonparametric p-value is the significance level under a Wilcoxon signed rank test

	Year Before Offer	Year of Offer
Operating Income		
Parents with subsidiary offers		
Mean	0.075	0.064
Median	0.064	0.062
Industry matched sample		
Mean	0.023	0.038
Median	0.078	0.067
Comparison test p values		
Parametric	0.184	0.216
Nonparametric	0.920	0.490
Net Income		
Parents with subsidiary offers		
Mean	0.023	-0.002[a]
Median	0.023	0.017[a]
Industry Matched Sample		
Mean	-0.026	0.012
Median	0.032	0.024
Comparison test p-values		
Parametric	0.180	0.562
Nonparametric	0.934	0.070

[a] Ratios are calculated after removing the gain on the subsidiary stock offerings

An examination of the mean and median net income in the year before the offer reveals no significant differences between the two groups. In the year of the offer, both the mean and median net income ratios are lower for the parents, but the difference is significant for only the median using a two-tailed Wilcoxon test (p = 0.07).[2]

Table 6-5 provides descriptive statistics for parents that offered subsidiary stock and parents that issued their own stock. Based on market value and asset and sales levels, parents that issued subsidiary stock were approximately twice as large as the parents that issued their own stock. They had larger levels of liabilities and net income which is related to their larger size. Their lower Tobin's q indicates that these parents were more mature companies with less profitable growth opportunities than the parents that issued their own stock.

Table 6-5 Descriptive Statistics for Parents with Subsidiary Offerings and Parents with Parent Offerings for Year of Offer

	Parents with Subsidiary Offerings (N = 108)		Parents Issuing Parent Stock (N = 200)	
	Mean	Median	Mean	Median
Market Value[a]	2448.14	421.91	1282.24	394.97
Assets[a]	9920.88	778.06	3044.84	471.38
Sales[a]	3879.84	739.24	1727.57	348.11
Liabilities[a]	8686.87	574.80	2426.06	281.04
Net Income[a]	111.50	27.68	6.75	14.81
Price of Stock	25.46	23.38	24.59	23.06
Price/Earnings	29.88	14.08	20.38	14.28
Tobin's Q	1.37	1.21	1.71	1.37
Annual % Price Change	0.12	0.00	0.37	0.15

[a]Figures are in millions of dollars

---

[2] Net income is scaled by lagged assets. For parents with subsidiary stock offerings the gain is deducted from the net income figure in the year of the offering.

Explanatory Variables

The explanatory variables used in the analysis fall into four groups: profitability, leverage, investment opportunities, timing measures, and proxies for managers' discretionary accounting choices. Most of these variables have found support as accounting or financing determinants in other empirical work.

Measures of Profitability

For the logit model, I use the change in operating income as a measure of profitability. In the univariate analysis, I examine the change in both operating income and net income. These variables were measured as the difference in operating income (or net income), scaled by lagged assets, between the year of the offer and one year before the offer. For parents with subsidiary offerings, I removed the gain on the offering before computing the change in net income.

As discussed in an earlier chapter, the earnings management hypothesis predicts that parents with subsidiary offerings will experience a decline in earnings (either net income alone or both operating income and net income) in the year of the offering. The earnings prospects hypothesis (from corporate finance theory) predicts that parents with subsidiary offerings will have smaller increases in earnings than parent firms that issue their own equity. Furthermore, the earnings prospects hypothesis suggests that the parent firms that issue their own equity will have increases in operating earnings (and will likely have increases in net income) in the year of the offer.[3] Therefore, significant results on the earnings variables would be consistent with predictions from both earnings management and corporate finance theory.

---

[3] Elliott and Hanna (1996) suggest that investors focus on earnings before special items.

interpretation of the findings will be based on the results of the tests on the other variables from earnings management and corporate finance theory

Measures of Leverage

Since part of the decision to issue equity is based on the amount of debt in the firm s capital structure I test four measures of leverage as well as differences in those variables from the year of the offer to the year before These measures include (1) the ratio of long term debt to lagged assets (2) the ratio of total debt to lagged assets (3) the interest coverage ratio which is defined as the ratio of operating income to interest payments and (4) the ratio of total liabilities to lagged assets The earnings management hypothesis predicts that parent firms with subsidiary stock offerings exhibit increases in leverage in the years prior to the subsidiary stock offering This prediction differs from the empirical results reported in the financial literature that the debt to equity ratio (measured in several different ways) falls or remains constant in the two years prior to firms issuing equity (Korejczyk et al 1990) Thus in contrast to the predictions for parent firms with subsidiary offerings parent firms that issue their own equity should not exhibit increases in leverage in the years prior to an equity offering

With respect to levels of leverage information asymmetry models predict that high growth firms--those with profitable investment opportunities--are more likely to finance with equity and to have lower levels of leverage relative to low-growth firms Lang et al (1996) found a negative relationship between leverage and future growth Thus firms issuing their own stock should have lower levels of leverage relative to firms that have offerings at the subsidiary level

Measures of Investment Opportunities

To test empirically the impact of investment opportunities on the decision to issue equity at the subsidiary level I examine several proxies for the profitability of new investments that have been used in prior research The first three measures are designed to capture Myers and Majluf's construct of assets in-place versus growth measures One of the most frequently used proxies for this construct is Tobin's q defined in this study as the ratio of the sum of the book value of debt and market value of equity to the book value of total assets The intuition behind this measure is that the numerator the sum of the book value of debt and the market value of equity--approximates the firm's market value and therefore is related to the profitability of both assets in-place and new investment opportunities The denominator--the book value of assets--represents the firm's assets-in-place The deviation of market value from book value is predicted to be due in part, to the profitability of new investment opportunities

A similar measure to Tobin's q is the ratio of the market value of equity to the book value of equity used by Gaver and Gaver (1993) Chung and Charoenwong (1991) Collins and Kothari (1989) and Lewellen Loderer and Martin (1987) According to Chung and Charoenwong the book value of equity represents the portion of the market value of equity which is due to assets already in place Thus the excess of market value over book value of equity can be attributed to the value of the firm's investment opportunities

A third measure of the value of investment opportunities similar in spirit to the Myers and Majluf concept of the relationship between assets in place and investment opportunities is the price/earnings ratio According to Chung and Charoenwong (1991) this ratio is a measure of the proportion of equity value due to assets-in-place relative to investment opportunities As in prior research (Gaver and Gaver 1993

Chung & Charoenwong 1991 Smith & Watts 1992) this study uses the earnings/price ratio rather than the price/earnings ratio in the analysis to minimize the possible distortion of an extremely low earnings figure Chung and Charoenwong prove that the larger the earnings/price ratio the smaller the proportion of equity value attributable to growth opportunities. Thus this study predicts the earnings/price ratio is positively related to the decision to issue stock at the subsidiary level

Timing Variables

According to Lucas and McDonald's project arrival theory (1990) firms are more likely to have profitable investment projects and therefore more likely to issue equity if their returns prior to the issue are high I examine both a one-year and a two-year return The one-year return is measured as the percentage change in price from one-year-before to two-years-before the stock offering the two year return is measured as the percentage change in price from one year-before to three years-before the stock offering This study predicts a negative relationship between stock returns and the decision to issue stock at the subsidiary level

Proxies for Discretionary Accounting Choices and/or Decisions

As discussed in an earlier chapter I use proxies for three types of discretionary accounting choices and/or decisions To proxy for managers discretionary accounting choices I use two measures of discretionary accruals 1) total accruals used by Healy (1985) and 2) DeAngelo's (1986) measure of the first difference in total accruals To measure the extent to which managers may have used discretionary expenditures to increase earnings I examine the one-year change in spending for research and development advertising and capital expenditures Lastly I investigate the potential for altering reported earnings through the timing of the following nonrecurring items special items discontinued operations extraordinary items and nonoperating income

Other Variables Used in the Analysis

In addition to market-based measures of the investment opportunity set widely used in the financial literature I also examined one type of discretionary expenditure--R&D intensity--which may give some indication of the relative support for growth options Gaver and Gaver (1993) Skinner (1993) and MacKie-Mason (1990) use research intensity defined as the ratio of R&D expenditures to either assets or sales as a proxy for investment opportunities The disadvantage with this measure is that it is not relevant for firms in certain industries Since many of the firms in my samples did not report R&D expenditures I omitted this variable from the logistic regression model

I also used three actual measures of growth to compare the two samples in the univariate analyses The first is net investments in the year of the offer divided by the book value of fixed assets in the prior year Net investment is defined as capital expenditures less depreciation A second measure is the rate of change of investment, defined as the ratio of capital expenditures in the year of the offer to capital expenditures in the prior year minus 1 The third measure is the one-year growth rate in employment, measured from the year of the offer to the prior year These three variables measure actual growth (or expansion) rather than the profitability of growth The theories related to equity offers predict a relationship between the decision to issue stock and the profitability of new investment opportunities According to Jensen (1986) managers may have incentives to increase the size of their firms even if growth is not profitable Therefore I did not use these actual growth measures as a basis for inferences concerning the profitability of the firms' investment opportunities but primarily for descriptive purposes

CHAPTER 7
RESULTS AND INFERENCES

Univariate Tests of Predictions of the Earnings Management Hypothesis

Multi-year Comparisons of Parent Firms That Issued Subsidiary Stock

Table 7-1 presents the means and medians of components of earnings for parents that recognized gains from subsidiary stock offers. The number of observations in the table varies across items because of the availability of the requisite financial information for each test. The focus of the analysis will be a comparison of financial data for the year of the offer relative to that of the prior year. Since the parent companies in the sample were not selected on the basis of being in financial difficulty, there is no reason to expect systematic earnings manipulation in earlier years.

Panels 1, 2, and 3 of Table 7-1 provide evidence about the levels of real investment expenditures. If managers use subsidiary stock gains to manipulate earnings, then they are also likely to "artificially" increase earnings in other ways, such as postponing expenditures. The results provide no support for the earnings management hypothesis as applied to changes in discretionary expenditures. For example, expenditures for R&D and advertising actually increased significantly in the year of the subsidiary stock offer at $p < 0.05$ using a one-tailed t-test and Wilcoxon test. Panel 3 indicates that over half of the firms in the sample had increases in capital expenditures in the year of the offer, which is the opposite of that predicted by the earnings management hypothesis. The growth in capital expenditures is consistent with the growth in sales and assets (Panels 4 and 5 of Table 7-1). As applied to

Table 7-1 Parents Recognizing Gains: Components of Earnings for Year Before and Year of Offer. The difference is computed as the amount in the year of offer less the amount in the year before the offer, scaled by lagged assets.

	Year Before Offer	Year of Offer	Difference= Yr Offer-Yr Before
Panel 1 R&D Expenditures[a]			
N	44	47	44
Mean	0.032	0.032	0.008
t-statistic p-value	0.000	0.000	0.044
Median	0.018	0.019	0.001
Wilcoxon p-value	0.000	0.000	0.000
Panel 2 Advertising Expenditures[a]			
N	30	32	30
Mean	0.030	0.029	0.004
t-statistic p-value	0.000	0.000	0.018
Median	0.020	0.018	0.002
Wilcoxon p-value	0.000	0.000	0.004
Panel 3 Capital Expenditures[a]			
N	90	90	90
Mean	0.068	0.067	-0.001
t-statistic p-value	0.000	0.000	0.456
Median	0.043	0.054	0.003
Wilcoxon p-value	0.000	0.000	0.011
Panel 4 Sales			
N	94	94	94
Mean	3848.644[b]	4034.849[b]	0.178[c]
t-statistic p-value	0.000	0.000	0.000
Median	871.996[b]	784.839[b]	0.125[c]
Wilcoxon p-value	0.000	0.000	0.000

Table 7.1--continued

	Year Before Offer	Year of Offer	Difference= Yr Offer-Yr Before
Panel 5 Assets			
N	94	94	94
Mean	10389.534^{b}	11227.350^{b}	0.225
t-statistic p-value	0.001	0.001	0.000
Median	710.867^{b}	898.771^{b}	0.150^{c}
Wilcoxon p-value	0.000	0.000	0.000
Panel 6 Net Income^{a}			
N	93	94	93
Mean	0.023	0.001	-0.018
t-statistic p-value	0.002	0.456	0.022
Median	0.024	0.018	0.004
Wilcoxon p-value	0.000	0.007	0.015
Panel 7 Operating Income^{a}			
N	93	94	93
Mean	0.076	0.066	0.006
t-statistic p-value	0.000	0.000	0.141
Median	0.066	0.062	0.008
Wilcoxon p-value	0.000	0.000	0.009

[a] Scaled by lagged assets
[b] Millions of dollars
[c] Difference is expressed as a fraction of the year before amount

discretionary expenditures, the evidence appears to indicate increases rather than decreases in expenditures, which corresponds to the economic conditions of the companies.

Panels 6 and 7 provide evidence regarding levels and changes in net income and operating income (scaled by lagged assets). The prediction of the earnings management hypothesis is that firms use the gains from the stock offerings to offset decreases in earnings. A comparison of the year before to the year of offer net income indicates that, after the gain on the offering was removed, these firms experienced significant declines in net income at $p < 0.03$ using both a one-tailed t test and a one-tailed Wilcoxon test. However, in panel 7 the results indicate that the firms actually had significant increases in operating income in the year of the offering at $p < 0.01$ using a one-tailed Wilcoxon test.

In general, the results do not indicate that firms in the sample used the gains from the stock offerings to offset declines in operating performance in the year of the subsidiary stock offering. Instead, the results suggest that the gains may have been used to offset loss items or write offs, a practice attributed to GE (Smith, Lipin, & Naj, 1994) and to oil companies (Linden, 1990) by the popular business press. Table 7-2 provides evidence on the extent to which nonrecurring and nonoperating items would have affected net income in the year of the stock offering. All items in the table are scaled by lagged assets. Special items are net of stock offering gains.

In the year of the offer, Special items are negative and significantly different from zero at $p < 0.001$ using both a one-tailed t test and a one-tailed Wilcoxon test. In addition, the change in Special items from year before to year of offer is negative and statistically significant at $p < 0.01$ using a one-tailed t test and $p < 0.001$ using a one-tailed Wilcoxon test. One interpretation for these results is that the companies used gains from stock offerings to offset anticipated write-offs or other loss items.

Panels 2 and 3 of Table 7.2 report the results of the tests on changes in discontinued operations and extraordinary items. The evidence does not support the earnings management hypothesis since neither showed significant increases in the year of the offering.

Panel 4 of Table 7.2 provides evidence to indicate that nonoperating income increased in the year of the offering at $p < 0.05$ using both a one tailed t-test and a one-tailed Wilcoxon test. Based on the significant findings reported in panels 1 and 4 the evidence suggests that managers used both nonoperating income and the gain from the offerings to offset loss items reported as Special Items.

Table 7-3 presents the evidence related to the prediction that parent companies had increases in leverage in the two-year period prior to the year of the subsidiary stock offering (one-year before versus three-years-before). An examination of the mean change in leverage reveals that three of the four measures increased significantly in the two year period prior to the offering based on a one-tailed t-test ($p < 0.01$). An examination of median changes in leverage reveals only two of the measures--total debt/assets and liabilities/assets--increased significantly over the two year period at $p < 0.05$ using a one-tailed Wilcoxon test. In general, the results support the prediction that parent companies that recognized gains on subsidiary stock offerings had increases in leverage in the period prior to the offerings.

Parents Compared to an Industry Matched Sample

As an internal validation check, I report the results of tests based on comparisons of my sample of parent firms with an industry matched sample. Industry matching was included to control for the potential influence of extraneous variables on

Table 7.2 Parents Recognizing Gains Components of Earnings for Year Before and Year of Offer Scaled by Lagged Assets

	Year Before Offer	Year of Offer	Difference– Yr Offer Yr Before
Panel 1 Special Items			
N	85	88	83
Mean	-0.004	-0.021	-0.018
t-statistic p-value	0.163	0.000	0.006
Median	0.000	0.000	-0.008
Wilcoxon p-value	0.425	0.000	0.000
Panel 2 Discontinued Operations			
N	89	89	89
Mean	0.000	0.001	-0.001
t-statistic p-value	0.440	0.356	0.385
Median	0.000	0.000	0.000
Wilcoxon p-value	0.447	0.340	0.440
Panel 3 Extraordinary Items			
N	91	92	91
Mean	0.002	0.001	0.000
t-statistic p-value	0.059	0.059	0.427
Median	0.000	0.000	0.000
Wilcoxon p-value	0.214	0.208	0.414
Panel 4 Nonoperating Income (Expense)			
N	91	92	91
Mean	0.007	0.012	0.007
t-statistic p-value	0.004	0.001	0.021
Median	0.003	0.004	0.001
Wilcoxon p-value	0.000	0.000	0.016

Table 7-3 Parents Recognizing Gains Change in Leverage in the Two Years Before the Offer The difference column is the difference in the ratios between year 1 and year 3

	3 Years Before Offer	1 Year Before Offer	Difference= 1 Yr 3 Yrs Before
Panel 1 Long term Debt/Assets			
N	93	93	93
Mean	0.217	0.255	0.038
t-statistic p value	0.000	0.000	0.010
Median	0.213	0.250	0.000
Wilcoxon p-value	0.000	0.000	0.157
Panel 2 Total Debt/Assets			
N	91	92	91
Mean	0.283	0.332	0.047
t statistic p value	0.000	0.000	0.004
Median	0.298	0.325	0.008
Wilcoxon p-value	0.000	0.000	0.040
Panel 3 Interest Coverage			
N	33	33	33
Mean	5.536	5.190	-0.346
t statistic p-value	0.019	0.031	0.455
Median	2.065	2.164	0.188
Wilcoxon p-value	0.000	0.000	0.441
Panel 4 Liabilities/Assets			
N	93	93	93
Mean	0.618	0.684	0.067
t statistic p-value	0.000	0.000	0.000
Median	0.614	0.686	0.032
Wilcoxon p-value	0.000	0.000	0.000

the analysis of the parents financial statement measures In this study an industry control is appropriate for the following two reasons First much of the analysis focuses on profitability and growth there is evidence to indicate that industry factors have an impact on profitability and sales growth measures (Powell 1996) Second another part of this study examines the leverage characteristics of parent firms prior research suggests that industry classification explains more than 50% of variations in leverage across firms (Bradley et al 1984)

Table 7 4 presents the evidence on changes in various income statement variables for the sample of parent firms that recognized gains on subsidiary stock offerings and for an industry-matched sample In the year of offer parent firms had significantly lower net income than the average of their industry-matched sample at p = 0 025 using a one-tailed t test and p = 0 001 using a one tailed Wilcoxon test However a comparison of changes in operating income reveals no significant difference between the two groups Panel 3 indicates that changes in Special Items (after excluding the subsidiary stock offering gain) were significantly more negative for parent companies than for the industry-matched sample at p = 0 007 using a one-tailed t test and p = 0 002 using a one-tailed Wilcoxon test. These results are similar to those reported in the previous section that parent firms had on average significantly lower net income in the year of the stock offerings over that reported in the year before Panel 2 demonstrates that the parents change in net income was lower than expected for their industry These results suggest that parent firms in my sample used the subsidiary stock offering gain to offset nonrecurring loss items (Special Items)

Table 7 5 reports the results of tests on both the Healy and DeAngelo measures of discretionary accruals for parents with subsidiary offerings and their industry matched sample for years -7 through 0 The earnings management hypothesis

Table 7-4 One Year Change in Financial Statement Variables (Scaled by Lagged Assets) for Parent Firms and an Industry Matched Sample. Variable means are calculated for each industry and matched with corresponding variables for parent firms

	Parents	Industry Matches	Difference–Parents Matches (Mean)
Panel 1 Operating Income			
N	94	93	93
Mean	0.006	0.003	0.003
t-statistic p-value	0.141	0.293	0.334
Median	0.009	0.010	0.005
Wilcoxon p-value	0.009	0.084	0.318
Panel 2 Net Income			
N	94	93	93
Mean	0.018	0.028	-0.046
t-statistic p-value	0.022	0.101	0.025
Median	0.004	0.005	-0.011
Wilcoxon p-value	0.015	0.118	0.001
Panel 3 Special Items			
N	83	86	78
Mean	-0.018	0.005	0.026
t-statistic p-value	0.003	0.201	0.007
Median	0.008	0.000	0.008
Wilcoxon p-value	0.000	0.498	0.002

Table 7-5 Discretionary Accrual Measures for Parents Recognizing Gains on Subsidiary Offerings and an Industry Matched Sample. Year 0 is the year of the equity offering. Each measure is scaled by lagged assets. The parametric p-value is the two-tailed significance level under a t-test for comparison of means. The nonparametric p value is the significance level under a Wilcoxon signed rank test

	Year Relative to Stock Offering							
Healy Measure	-7	-6	-5	-4	-3	-2	-1	0
Parents with subsidiary offers								
Mean	-0.059	0.006	0.006	-0.029	-0.033	0.026	0.027	0.035
Median	0.044	-0.026	0.032	0.037	-0.039	-0.033	0.040	-0.034
Industry-matched sample								
Mean	-0.014	-0.033	-0.024	0.037	0.003	-0.035	0.023	0.044
Median	-0.019	-0.030	-0.033	0.037	-0.024	0.044	0.037	0.050
Comparison test p-values								
Parametric	0.161	0.121	0.176	0.637	0.138	0.791	0.875	0.285
Non-parametric	0.277	0.363	0.446	0.625	0.536	0.405	0.388	0.375
DeAngelo Measure								
Parents with subsidiary offers								
Mean	-0.064	0.057	0.018	-0.018	0.021	0.004	-0.013	-0.003
Median	0.032	0.001	0.006	-0.002	0.004	0.007	-0.010	0.006
Industry-matched sample								
Mean	0.001	-0.004	0.001	0.006	0.035	-0.024	0.011	0.007
Median	0.007	-0.013	-0.007	0.006	0.004	-0.019	-0.004	0.019
Comparison test p values								
Parametric	0.139	0.083	0.354	0.461	0.412	0.500	0.314	0.601
Non-parametric	0.333	0.611	0.513	0.911	0.578	0.391	0.446	0.397

predicts that the parents' discretionary accruals will be more income-increasing relative to those of the matched sample. The results indicate that over those 8 years, only the year -6 using the DeAngelo measure is significant (under the parametric test only). Since random variation could produce a significant result in one out of eight years, these data do not support the predictions of the earnings management hypothesis that managers of the parent firms with subsidiary offerings make income-increasing accounting choices.

Table 7-6 reports the results of tests on the two-year change in leverage prior to the year of offering for the parent companies and the industry matched sample. The evidence indicates that parent companies' leverage, measured as the ratio of liabilities to assets (Panel 4), increased significantly relative to that of the industry matched sample at $p = 0.011$ using a one-tailed t-test and at $p = 0.001$ using a one-tailed Wilcoxon test. When leverage is measured as the ratio of total debt to assets (Panel 2), the parent firms' increase in leverage is significantly higher than the industry-matched sample at $p = 0.086$ using a one-tailed t-test and $p = 0.063$ using a one-tailed Wilcoxon test. Tests on two other measures of leverage, reported in Panels 1 and 3 of Table 7-6, are not significant. The tests on the two-year change in interest coverage (Panel 3 of Table 7-6), where interest coverage is defined as operating income divided by interest payments, is not likely to be representative of the full sample because the data on interest payments were not available for the majority of the sample.

Univariate Tests of Predictions from Corporate Finance Theory

The evidence presented above supports the conclusion that managers used the accounting gains from subsidiary stock offerings to manipulate earnings. However, these results can only be interpreted from strictly an accounting choice perspective. That is, the results suggest that when accounting for subsidiary stock offerings

Table 7-8 Two-Year Change in Leverage Prior to Year of Subsidiary Stock Offering for Parent Firms and an Industry Matched Sample. Variable means are calculated for each industry and matched against corresponding variables for parent firms

	Parents	Industry Matches	Difference= Parents-Matches (Mean)
Panel 1 Long Term Debt/Assets			
N	93	93	93
Mean	0.038	0.013	0.025
t-statistic p-value	0.010	0.187	0.142
Median	0.000	0.001	0.007
Wilcoxon p-value	0.152	0.380	0.168
Panel 2 Total Debt/Assets			
N	91	93	91
Mean	0.047	0.001	0.045
t-statistic p-value	0.004	0.480	0.086
Median	0.008	-0.003	0.033
Wilcoxon p-value	0.040	0.415	0.053
Panel 3 Interest Coverage			
N	33	38	33
Mean	0.346	-21.738	23.191
t-statistic p-value	0.455	0.030	0.042
Median	0.189	-0.321	0.627
Wilcoxon p-value	0.441	0.121	0.082
Panel 4 Liabilities/Assets			
N	93	93	93
Mean	0.067	0.035	0.101
t-statistic p-value	0.000	0.191	0.011
Median	0.032	-0.003	0.044
Wilcoxon p-value	0.000	0.343	0.001

managers manipulate earnings by choosing the income-increasing option of recognizing the gain on the transaction. The following sections extend the analysis to the broader question of managers' incentives to offer subsidiary equity. I focus on finance considerations that could suggest a potential advantage to offering subsidiary equity over parent equity. The results from this analysis will provide a basis for inferences concerning the role of earnings management in that decision. In particular, evidence of a finance motive would suggest that earnings management did not play a major role in managers' decision to offer subsidiary stock. However, an apparent lack of finance motives combined with the results from the previous sections would suggest a potential role for earnings management in the equity decision.

In the following sections, I discuss the results of tests of predictions of finance theory in which I compare the full sample of parent firms with subsidiary offerings to a matched sample of parent firms with equity offerings at the parent level. The full sample includes the 14 observations for which the parent firms did not recognize a gain on the subsidiary offering. Since omitting the 14 observations leads to the same conclusions and similar significance levels, I do not report those results here.

Tests of the Overvaluation Hypothesis

Table 7.7 presents the evidence on the predictions of the overvaluation hypothesis with regard to stock prices. In the period prior to the subsidiary stock offerings, parent firms with subsidiary stock offerings (parent firms) are predicted to be undervalued by the market. By contrast, parent firms that issue stock at the parent level (matched sample) are expected to be overvalued by the market. I test this prediction by examining the firms' change in stock prices in both the one- and two-year period prior to year of the stock offerings. The overvaluation hypothesis suggests that, relative to parent firms that issue stock at the parent level, parent firms with subsidiary offerings will have smaller (percentage) increases in price.

Table 7-7 Parent Firms with Subsidiary Offerings Compared with a "Matched" Sample of Parent Firms that Issued their Own Stock. Test of overvaluation hypothesis. The significance level is for a one-tailed test under the alternative hypothesis that the parent firms with subsidiary offers had smaller increases in price in the (one- or two-year) period ending with the year of offering than parents with parent offerings.

	Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1 Prior One Year Percentage Change in Price			
N	103	185	
Mean	15.052	151.749	0.007[a]
Median	2.203	15.693	0.002[b]
Panel 2 Prior Two-Year Percentage Change in Price			
N	102	176	
Mean	18.699	127.003	0.015[a]
Median	-2.498	23.175	0.002[b]

[a] Significance level under a one tailed t test

[b] Significance level under a one-tailed Wilcoxon rank sum test

Panels 1 and 2 report the mean and median percentage changes in stock prices for the two samples of parent firms. The results indicate that, relative to the matched sample, parent firms had significantly lower mean and median price increases in both the one-year and two-year period prior to the year of the stock offerings. These results are significant at p = 0.07 using a one tailed t test and p = 0.002 using a one-tailed Wilcoxon test. Panel 2 indicates that over half of the parent firms had experienced price declines in the two-year period prior to the year of offer. In general, the results provide some evidence to support the overvaluation hypothesis that parent firms that issue stock at the subsidiary level are undervalued by the market.

Tests of the Earnings Prospect Hypothesis

Table 7-8 presents the results of the tests on the earnings prospect hypothesis. The hypothesis predicts that in the year of the stock offering, parent firms with

Table 7-8 Parent Firms with Subsidiary Offerings Compared with a Matched Sample of Parent Firms that Issued their Own Stock. Test of Earnings Prospects Hypothesis. The significance level is for a one-tailed test under the alternative hypothesis that parent firms with subsidiary offers have smaller increases in earnings than parent firms that issue their own stock. One year change in income is scaled by lagged assets.

	Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1 One-Year Change in Operating Income			
N	107	195	
Mean	0.007	0.037	0.001[a]
Median	0.010	0.022	0.001[b]
Panel 2 One-Year Change in Net Income			
N	107	195	
Mean	-0.014	0.017	0.012[a]
Median	-0.004	0.014	0.001[b]

[a] Significance level under a one-tailed t-test

[b] Significance level under a one-tailed Wilcoxon rank sum test subsidiary stock

offerings have smaller increases in earnings than parent firms that issue their own stock. Panel 1 reports the results of the tests on the one-year change in operating income. The results indicate that both samples of parent firms experienced increases in operating income. Furthermore, the increase in operating income is significantly smaller for the parent firms with subsidiary stock offerings than for parent firms with parent offers at $p < 0.001$ using both a one-tailed t-test and a one-tailed Wilcoxon test.

Panel 2 of Table 7-8 presents the evidence on the one year change in net income. The results indicate that parent firms with parent offerings had increases in net income while the parent firms with subsidiary offerings had decreases in net income. The difference in the change in net income between the two parent samples is significant at $p < 0.05$ using a one-tailed t-test and $p < 0.01$ with a one-tailed Wilcoxon test.

Tests of the Profitability of Investment Opportunities

Table 7.9 reports the results of the tests related to the profitability of investment opportunities. This study predicts that parent firms with subsidiary offers have less profitable investment opportunities than firms that issue their own stock. An examination of Tobin's q calculated for the year before the offer (Panel 1) reveals that the parent firms with subsidiary offers had significantly smaller mean and median values at $p < 0.005$ using both a one-tailed t test and a one-tailed Wilcoxon test. Similar results are reported on the tests of Tobin's q calculated for the year of the offer (Panel 2).

Panels 3 and 4 of Table 7.9 report the results of tests on a second proxy for the profitability of investment opportunities—the ratio of firm market value to the book value of assets. Consistent with the predictions, the median value for the parents with subsidiary offers is significantly smaller for both the year before and the year of the stock offer at $p < 0.09$ using a one-tailed Wilcoxon test. Although the difference in the means in the year before the offer is in the predicted direction, it is not significant at conventional levels.

Panels 5 and 6 of Table 7.9 report the results of tests on the third proxy for the profitability of investment opportunities—the ratio of operating earnings per share (EPS) to price, or the EP ratio. Since high EP ratios indicate low growth, this study predicts that parents with subsidiary offers have higher mean and median EP ratios than parents that issued their own stock. Consistent with prior research, this study excludes from the analysis companies with negative EPS.

In the year before the offer (Panel 5) the mean EP ratio for parents with subsidiary offerings is significantly greater than the corresponding mean for parents that issued their own stock at $p < 0.10$ using a one-tailed t test. Similarly, the median difference is also greater for the parents with subsidiary offerings, but the difference is

Table 7.9 Tests of the Profitability of the Firm's Investment Opportunities. Tobin's q is the ratio of the sum of the book value of debt and market value of equity to the book value of total assets. The significance level is for a one-tailed t-test for the difference in the means and a one-tailed Wilcoxon test for the difference between the medians.

		Parents with Subsidiary Offers	Parents with Parent Offers	Significance Levels
Panel 1	Tobin's Q--Year Before Offer			
	N	103	192	
	Mean	1.003	1.432	0.004
	Median	0.809	1.037	0.004
Panel 2	Tobin's Q- Year of Offer			
	N	104	197	
	Mean	1.015	1.423	0.004
	Median	0.884	1.109	0.001
Panel 3	Market-to-Book Equity--Year Before Offer			
	N	105	193	
	Mean	1.258	2.178	0.121
	Median	1.907	1.924	0.088
Panel 4	Market-to-Book Equity--Year of Offer			
	N	106	189	
	Mean	4.122	1.836	0.092
	Median	1.712	1.943	0.041
Panel 5	EPS (Operating) to Price--Year Before Offer			
	N	113	174	
	Mean	0.175	0.143	0.061
	Median	0.118	0.115	0.432
Panel 6	EPS (Operating) to Price--Year of Offer			
	N	81	182	
	Mean	0.182	0.138	0.229
	Median	0.129	0.117	0.188

not statistically significant. The results of the tests for the mean and median EP ratio in the year of the offer (Panel 6) are not significant. Panel 9 indicates that the parents with subsidiary offerings have larger EP ratios but the difference is not statistically significant.

In general, the evidence on the EP ratio presented in Panels 5 and 6 does not support the prediction that parents with subsidiary offers have less profitable investment opportunities than parents that issue their own stock One reason for these disappointing findings is that the EP ratio is not an adequate proxy for growth or investment opportunities Much of the research relies on the EP ratio as a timing variable similar to the stock return variable Researchers in corporate finance generally rely on Tobin's q to measure the profitability of investment opportunities

Table 7 10 reports the results of the tests on actual growth measures Although the measures are not indicative of the profitability of investment opportunities they may provide evidence to distinguish the two samples of parent firms The results presented in Panels 2 and 3 indicate that the matched sample of parent firms that issued their own stock experienced significantly greater actual growth in employment than the parent firms that issued subsidiary stock These results are significant at $p < 0.05$ using both t and Wilcoxon tests In addition the ratio of (year of offer) net investments to (prior year) fixed assets is significantly larger for the firms that issued their own stock at $p < 0.02$ These results suggest that the firms that issued their own stock were experiencing greater actual growth and that was likely to have been a factor in their decision to issue equity

Tests of Predictions on Leverage

Table 7 11 reports the results of the tests on leverage The predictions from corporate finance theory suggest that parents with subsidiary offerings will have higher levels of leverage than those firms that issue subsidiary stock I test this prediction by examining the difference in book leverage for the two samples Book leverage is defined as the ratio of total debt to assets For the year before the offer the sample of parent firms with subsidiary offers has higher mean and median levels but the results are not significant (see Panel 1) This result is not unexpected considering that the

Table 7.10 Comparisons of Actual Growth Measures. The significance level is for a one tailed t test for the difference in the two means and a one tailed Wilcoxon test for the difference between the medians

		Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1	Net Investments-Year of Offer			
	N	68	141	
	Mean	0.059	0.194	0.011
	Median	0.030	0.073	0.002
Panel 2	One-Year Employment Growth			
	N	102	197	
	Mean	0.106	0.192	0.044
	Median	0.060	0.074	0.021
Panel 3	Three-Year Employment Growth			
	N	96	187	
	Mean	0.281	0.792	0.005
	Median	0.138	0.256	0.005
Panel 4	R&D/Sales Year of Offer			
	N	53	84	
	Mean	0.042	0.118	0.115
	Median	0.015	0.020	0.279

earlier finance literature fails to find leverage to be significant in explaining the security issue decision.

Panel 2 of Table 7.11 reports the test of differences in book leverage for the year of the offer. Since the value of book leverage in the year of offer is effected by the stock offering, the results presented in Panel 2 are intended for descriptive purposes only. The evidence indicates that the parent firms with subsidiary offers had significantly higher mean and median levels of leverage in the year of the stock offering than the parents that issued their own stock (p = 0.001).

Table 7.11 Tests on Levels and Changes in Leverage. The significance levels are the results of a one-tailed t-test of the differences in the means and a one-tailed Wilcoxon test of the difference in the medians for the two samples of parent firms

		Parents with Subsidiary Offers	Parents with Parent Offers	Significance Levels
Panel 1	Book Leverage Year Before Offer			
	N	106	192	
	Mean	0.330	0.308	0.153
	Median	0.321	0.314	0.171
Panel 2	Book Leverage-Year of Offer			
	N	106	198	
	Mean	0.327	0.248	0.001
	Median	0.310	0.253	0.001
Panel 3	Prior Two Year Change in Total Debt/Assets			
	N	104	183	
	Mean	0.037	0.002	0.039
	Median	0.001	-0.007	0.214
Panel 4	Two Year Change in Liabilities/Assets			
	N	106	184	
	Mean	0.058	-0.007	0.001
	Median	0.030	0.004	0.006

Panels 3 and 4 of Table 7.11 provide evidence on the prior two-year change in leverage. Although corporate finance theory makes no predictions on the change in leverage for companies that issue their own stock, I nevertheless examine the differences between the two samples as an additional check of the predictions of the earnings management hypothesis. Consistent with those predictions, the results generally show that the parent firms with subsidiary stock offerings had significantly larger increases in leverage than the parent firms that issued their own stock.

Sensitivity Analysis

The results of the tests on the predictions from corporate finance theory support the conclusion that finance considerations played a role in the decision to offer stock in a consolidated subsidiary These findings suggest that the gain from the offering was not the driving force that motivated the transaction That is the combined evidence from the tests on both the earnings management and finance hypotheses suggests that the subsidiary stock offering gain was of second order importance The offering simply provided an added benefit by allowing managers the option of recognizing a gain on the transaction The results of the tests on the predictions from the earnings management hypothesis indicate that managers used the gain to offset nonrecurring (possibly discretionary) loss items

To provide further evidence on the relative importance of the gain in the decision to issue stock in a consolidated subsidiary I examine a subsample of the parents with "large" gains from the subsidiary offerings I define large" in two different ways 1) the ratio of gain to net sales is in the upper one-third of the sample or 2) the ratio of gain to prior year assets is in the upper one-third of the sample I test the predictions of corporate finance theory by comparing each of these two large" gain subsamples to the matched sample of parent firms that issued their own stock I expect the earnings management motive to be more important to parent companies that recognized "large" gains Therefore if the large gain was the motivating factor for the subsidiary stock transaction the tests of the predictions from corporate finance theory (reported for the full sample in Tables 7-7 through 7-11) should not yield significant results Insignificant results would suggest that earnings management (and not finance considerations) was the motivating force for these parents in their decision to issue stock in their consolidated subsidiary

The results of the tests using the subsample of parent firms with "large" subsidiary stock offering gains are reported in the Appendix B. Since the results are similar for both subsamples, I report the results for only one subsample based on the ratio of gain to net sales. The results of the comparison of the subsamples of parents with subsidiary offers to the matched sample of parent offerings are consistent with the evidence reported above using the full sample. That is, the analysis supports the conclusion that the size of the gain did not influence the decision to issue stock at the subsidiary level. The decision appeared to be primarily based on finance considerations. However, the earlier results also suggest that earnings management was likely to have been a motive in the decision to actually recognize the gain.

Multivariate Analysis of the Stock Issuance

In this section, I provide results of the empirical model of the stock issuance decision for my sample firms. The model uses logistic regression and incorporates variables from both earnings management and corporate finance theories. Univariate analyses of these variables were presented in the first two sections of this chapter. For the logistic regression, an equity offering at the subsidiary level takes the value of one; a parent issuing its own equity takes the value of zero. Table 7-12 summarizes the proxy variables used in the logistic regressions and their expected relation to the incidence of stock offerings in a consolidated subsidiary.

The logistic regression includes only one income variable--the change in operating income. This variable is a proxy for both the earnings management and earnings prospect (from corporate finance theory) hypotheses. Both hypotheses predict that the subsidiary-stock-offering parents will have smaller changes in earnings than parents that issued their own equity. Therefore, both hypotheses predict that the

Table 7.12 Proxies for Determinants of the Stock Issuance Decision

Variable	Proxying for (Hypothesis)	Expected Sign
Special Items	Level of Nonrecurring Items (earnings management)[a]	Negative
One-year change in operating income	Change in earnings (earnings management) and corporate finance	Negative
Ratio of liabilities to assets--year before offer	Level of leverage (corporate finance)	Positive
Change in ratio of liabilities to assets	Change in leverage (earnings management)	Positive
Tobins q--year before offer	Quality of investment opportunities (corporate finance)	Negative
Market-to-book equity--year before offer	Quality of investment opportunities (corporate finance)	Negative
EPS to price--year before offer	Quality of investment opportunities or timing variable (corporate finance)	Negative
Prior one-year change in price	Over (under) valuation (corporate finance)	Negative
Prior two-year change in price	Over (under) valuation (corporate finance)	Negative

[a] I include the level of Special Items in the regression because the univariate analysis indicated that parents with gains from subsidiary stock offerings had more negative levels of Special Items in the year of the stock offering

change in operating income is negatively related to the decision to issue stock at the subsidiary level

A second income variable--the change in net income--is omitted from the analysis because like the change in operating income this variable does not distinguish between the two hypotheses Since the univariate analyses indicated that companies used the gain to manage "special items." I include the level of "Special Items" in the logistic regressions. The earnings management hypothesis predicts this variable is negatively related to the decision to issue stock at the subsidiary level.

Table 7-13 reports the Pearson and Spearman correlations between the explanatory variables as well as their correlations with a dummy variable that identifies firms with subsidiary stock offerings. Consistent with predictions from both earnings management and corporate finance theory, there is a significant negative correlation between the subsidiary stock offering dummy variable and changes in operating income and special items. The results also indicate a significant positive correlation of the dummy variable with the change in the ratio of liabilities to assets. Of the three proxies for investment opportunities, only Tobin's q is significantly correlated with the stock offer dummy variable using both Pearson and Spearman correlation measures. The Spearman correlations of the dummy variable with the change in price variables are significant and negative (as predicted by finance theory); the Pearson correlation is significant only for the two-year change in price.

Table 7-14 presents the results of five similar versions of the logistic model. Since the prior one-year change in price and the prior two-year change in price are correlated, they appear together in only one regression. I include only one measure of earnings (the change in operating income) in all the regressions. I use the level of Special Items (an earnings management proxy) rather than the change in net income because its significance (or lack of) provides evidence strictly on earnings management. The five regressions include only one measure for leverage--the ratio of liabilities to assets--since the univariate analysis indicates that ratio was more consistent in distinguishing the two parent samples. Regressions (3), (4), and (5) include only one of the proxies for the quality of investment opportunities--Tobin's q--

Table 7.13 Pearson and Spearman Correlation Matrices Between the Subsidiary Stock Choice and Various Proxies for Potential Determinants of the Subsidiary Stock Choice. Pearson correlations are shown in the first line and Spearman rank correlations are presented in the second line

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Subsidiary Stock Dummy	1.00	-0.13*	0.18*	0.07	0.19*	0.15*	0.07	0.09	-0.13*	0.06
	1.00	-0.13*	-0.23*	0.08	0.15*	0.15*	0.08	0.17*	0.17*	0.09
(2) Special Items		1.00	0.19*	0.08	-0.08	-0.12*	0.03	0.02	0.04	0.03
		1.00	0.09	0.01*	-0.09	-0.04*	0.08	0.10	0.04	0.08
(3) Change in Operating Income			1.00	0.21*	0.06	0.03	0.02	-0.28*	0.15*	0.00
			1.00	-0.23*	0.03	0.28*	0.27*	0.14*	0.16*	-0.14*
(4) Ratio of Liabilities to Assets-year before offering				1.00	0.06	-0.50*	-0.15*	0.06	0.05	0.18*
				1.00	0.14*	-0.54*	-0.17*	0.02	0.02	0.22*
(5) Prior Two-year Change in Ratio of Liabilities to Assets					1.00	-0.08	0.03	0.30*	-0.23*	0.44*
					1.00	-0.08	0.06	0.07	-0.14*	0.16*
(6) Tobin's q--year before offer						1.00	0.32*	-0.01	0.02	0.13*
						1.00	0.69*	0.03	0.18*	0.31*
(7) Ratio of Market to Book Equity--year before offer							1.00	0.00	0.03	0.07
							1.00	0.14*	0.29*	-0.29*
(8) One-year Percentage Change in Price								1.00	0.56*	0.34*
								1.00	0.67*	0.14*
(9) Two year Percentage Change in Price									1.00	0.33*
										0.17
(10) Ratio of Earnings to Price year before offer										1.00
										1.00

* Denotes significance at better than 0.10 level

Table 7.14 Determinants of Parent Type- All Firms Including Regulated Firms Logistic regression in which the dependent variable takes the value of one for parents with subsidiary stock offers and zero otherwise The change in net (operating) income is net (operating) income in the year of the offer —net of gain-- minus net (operating) income in the year before the offer scaled by lagged assets The change in the ratio of liabilities to assets is the difference in that ratio calculated for the year before and that ratio for three years before P represents the number of parent firm observations with subsidiary offers and M the number of parent firms that issued their own stock

Regression	(1)	(2)	(3)	(4)	(5)
P M	80 146	80 138	100 173	101 181	100 173
Intercept	0.2725 (0.81)	-0.6448 (0.57)	0.1943 (0.52)	0.1310 (0.68)	0.1842 (0.52)
Special Items	-5.9984 (0.23)	5.7629 (0.25)	6.9775 (0.06)	7.0683 (0.06)	-6.3765 (0.06)
Change in operating income	-10.9410 (0.01)	-11.4713 (0.01)	9.2403 (0.01)	9.4622 (0.01)	-9.2435 (0.01)
Ratio of liabilities to assets—year before offer	0.9892 (0.48)	1.4983 (0.26)			
Change in ratio of liabilities to assets	2.8511 (0.05)	1.8344 (0.18)	2.2892 (0.04)	2.8682 (0.01)	2.2895 (0.04)
Tobin's q -- year before offer	-0.8708 (0.17)	0.5564 (0.22)	0.4857 (0.04)	0.5030 (0.03)	0.4856 (0.04
Market-to-Book Equity—year before offer	0.0977 (0.46)	0.0997 (0.40)			
Prior one-year change in price	-0.447 (0.16)		0.0028 (0.99)	-0.2848 (0.20)	
Prior two-year change in price		-0.4274 (0.07)	-0.2692 (0.26)		0.2908 (0.12)
Ratio of EPS to Price—year before offer	-1.5638 (0.60)	0.8193 (0.79)			
Pseudo R squared	0.25	0.26	0.20	0.20	0.220
% correct	75.4%	75.3%	71.4%	72.3%	71.4%

because the other two proxies (ratio of market to book equity and the EP ratio) were not statistically significant in the univariate tests (Table 7-9) and they are not significantly correlated with the stock dummy variable (Table 7-13).

In the five regressions reported in Table 7-14, only one of the coefficients (market-to book equity) has the wrong sign, but it is not statistically significant. Only the change in operating income variable has significant coefficients in all five regressions. These results indicate that the change in operating income is negatively related to the decision to issue stock at the subsidiary level. Similar to the evidence presented in the univariate analyses, the change in the ratio of liabilities to assets is positively related to the decision to issue subsidiary stock. This variable is significant in four of the five regressions. The coefficient on Special Items is significant in three of the five regressions at $p < 0.10$. The coefficient on the prior year level of leverage, measured as the ratio of liabilities to assets (regressions (1) and (2)), is not significant. This result is consistent with the evidence presented in the univariate tests. Earlier studies on the security issue decision (Jung et al., 1996; Baxter & Cragg, 1970) do not find a significant leverage coefficient either.

When all three proxies for the quality of investment opportunities are included in regressions (1) and (2) of Table 7-14, none of the coefficients are significant. Regressions (3), (4), and (5) include only Tobin's q in the analysis since it was the only one of the three proxies significant in the univariate tests. After removing the other two proxies, the coefficient on Tobin's q is significant at $p < 0.05$.

Regression (2) of Table 7-14 indicates that the two-year change in price has a significant coefficient at $p < 0.10$. The one year change in price is not statistically significant in any of the regressions. Furthermore, when both of the price change variables are included in regression (3), neither is statistically significant.

In general, the results support both the earnings management and the corporate finance hypotheses. Consistent with the earnings management hypotheses, the results show that the decision to offer stock at the subsidiary level is negatively related to changes in leverage and to the level of Special Items. The evidence also indicates that the decision to issue subsidiary stock is negatively related to the change in operating income—a finding that is consistent with both the earnings management and corporate finance hypotheses. Furthermore, consistent with predictions from corporate finance theory, the results suggest that firms with less profitable investment opportunities (as measured by Tobin's q) are more likely to have subsidiary stock offers.

Table 7-15 reports the results of the five regressions using the reduced sample of nonregulated firms. The reduced sample excludes financial institutions and utilities. The coefficients on the market-to-book equity have the opposite signs, but none is significant. All other coefficients have the expected signs. Due to the use of a more uniform sample, both the pseudo R-squared and the percentage of correct classification increases. The evidence provides strong support for the hypotheses from corporate finance theory. The results show that the decision to issue stock at the subsidiary level is negatively related to the profitability of investment opportunities (as measured by Tobin's q). Furthermore, the results indicate that firms with decreases in operating income and smaller price changes over the two-year period are more likely to have subsidiary offers. While the significant results for operating income could also be interpreted as support for the earnings management hypotheses, the results on the other two earnings management variables are inconclusive. Only two of the five coefficients on the change in the ratio of liabilities to assets are significant at $p < 0.10$. None of the coefficients on Special Items is significant. In general, if financial institutions and regulated firms are excluded from the sample, the results indicate that firms with smaller changes in operating income and less profitable investment opportunities are more likely to have subsidiary offers.

Overall, the results from the logistic regressions are consistent with the evidence presented in the univariate analysis of the predictions from corporate finance theory

Table 7-15 Determinants of Parent Type—Regulated Firms Excluded Logistic regression in which the dependent variable takes the value of one for parents with subsidiary stock offers and zero otherwise The change in net (operating) income is net (operating) income in the year of the offer —net of gain — minus net (operating) income in the year before the offer scaled by lagged assets The change in the ratio of liabilities to assets is the difference in that ratio calculated for the year before and that ratio for three years before P represents the number of parent firm observations with subsidiary offers and M the number of parent firms that issued their own stock

Regression	(1)	(2)	(3)	(4)	(5)
P M	67 101	67 101	67 94	65 122	88 130
Intercept	-0.8169 (0.50)	0.3254 (0.79)	0.8499 (0.02)	0.7487 (0.04)	0.8524 (0.02)
Special items	-0.8000 (0.88)	0.5810 (0.91)	-3.8530 (0.32)	3.7238 (0.31)	3.6858 (0.32)
Change in operating income	-11.9055 (0.01)	-12.1051 (0.01)	-9.2795 (0.01)	9.8346 (0.01)	-8.2407 (0.01)
Ratio of liabilities to assets—year before offer	0.8459 (0.55)	1.5703 (0.27)			
Change in ratio of liabilities to assets	2.4845 (0.09)	1.1648 (0.44)	1.8204 (0.12)	2.6326 (0.02)	1.8154 (0.12)
Tobin's q— year before offer	-1.1285 (0.04)	-0.9803 (0.05)	-0.7456 (0.01)	-0.7652 (0.01)	0.7470 (0.01)
Market-to-Book Equity	0.0948 (0.48)	0.0967 (0.36)			
Prior one year change in price	-0.5265 (0.13)		0.0451 (0.89)	-0.3308 (0.16)	
Prior two year change in price		-0.5820 (0.04)	-0.4255 (0.15)		0.3985 (0.07)
Ratio of EPS to Price	-2.7193 (0.39)	-1.6247 (0.64)			
Pseudo R-squared	0.34	0.37	0.27	0.28	0.27
% correct	79.7%	80.3%	74.5%	74.5%	74.8%

The regressions indicate that parent firms had lower stock market returns ($H4_{CF}$), smaller increases in operating earnings ($H5_{CF}$), and less profitable investment opportunities ($H6_{CF}$) than parent firms that issued their own stock. As was the case in the univariate analysis, the regressions do not support this study's fourth prediction of corporate finance theory ($H7_{CF}$) that parent firms with subsidiary offerings had lower levels of leverage than parent firms that issue their own stock.

Since the logistic regressions compare two groups of parent firms with stock offerings at different levels of the consolidated entity, their results provide direct evidence relating primarily to finance theory. However, the findings reported from the logistic regressions in Table 7.14 are also consistent with the predictions of the earnings management hypothesis. Evidence that parent firms with subsidiary stock offerings had smaller increases in earnings is compatible with the predictions on earnings management that parents with subsidiary offerings experience a decline in earnings in the year of the offering. Further support for earnings management is the finding in many of the regressions of a significant coefficient for the change in leverage (the ratio of liabilities to assets), which is consistent with $H2_{EM}$. In addition, if the full sample is considered, the results (reported in Table 7.14) provide strong support for the earnings management hypothesis $H3B_{EM}$ that the decision to issue stock at subsidiary level is negatively related to the level of nonrecurring items (Special Items).

CHAPTER 8
CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

In 1983, the SEC issued Staff Accounting Bulletin 51 which permitted (but did not require) parent companies to recognize gains or losses arising from stock issuances by subsidiaries. Prior to 1983, the SEC had required that gains arising from equity offerings by subsidiaries be reported as adjustments to Paid in-Capital on the consolidated balance sheet and not in the income statement. In 1995, the Financial Accounting Standards Board issued an exposure draft on consolidated accounting policies that bars any recognition of gains (or losses) on subsidiary equity offerings. However, as of December 1997, the effective date of the new standard has been postponed. According to FASB project manager Ron Bosco, it is likely that the issue on gain recognition will be removed from the standard and SAB 51 will remain effective indefinitely.

This study investigated whether managers manipulate reported earnings by taking advantage of the option allowed by SAB 51 to recognize gains on subsidiary stock offerings. I explored three empirical implications of the earnings management hypothesis. First, I investigated whether managers used the gains to offset a decline in earnings. Next, I tested the implication that managers used the gains to reduce the likelihood of violating accounting based provisions in debt agreements. Finally, I examined the relationship between subsidiary stock offerings and other discretionary actions managers may have taken to artificially affect reported earnings.

I also explored financial considerations of the decision to issue subsidiary stock. The corporate finance literature has developed a number of theories to explain the security issue decision The present study used four predictions from this literature to provide a broader and more complete examination of a manager's decision to issue stock at the subsidiary level The first prediction examined was based on Nanda's (1991) results firms that issue equity at the subsidiary level are on average undervalued by the market. The second prediction examined was that parent firms with subsidiary offerings have smaller increases in earnings than parent firms that issue their own equity The last two predictions examined are that firms that issue subsidiary stock have on average less profitable investment opportunities and higher levels of leverage than firms that issue their own stock

In general the results of the empirical tests supported the predictions of the earnings management hypothesis and three of the four predictions from the corporate finance literature Consistent with the earnings management hypothesis the evidence indicated that firms with decreases in net income increases in leverage and lower (more negative) special items were more likely to have subsidiary stock offerings In support of the predictions from finance theory the results showed that parents with subsidiary offerings had smaller increases in operating earnings less profitable investment opportunities (as measured by Tobin's q) and lower returns (as measured by the prior two-year change in price) than parent firms that issued their own stock.

The results indicated that the parents decrease in net income did not appear to be related to a decline in their contemporaneous economic conditions On the contrary for the parent firms in my sample sales had increased in the year of the offer and operating income had not declined significantly However the amount of Special items reported in the year of the offer was significantly negative and significantly more negative than what was reported in the year before the offer One interpretation for these findings is that managers used the subsidiary stock issuance gains to offset write-offs or other loss items

The results of this study may prove to be useful to the members of the Financial Accounting Standards Board (FASB) who are working on the project on consolidated accounting issues. The FASB may benefit by taking into account the evidence provided herein that managers appear to be using the subsidiary stock offering gains to manage their write-offs. To this date, many members of the FASB involved on the consolidation accounting project erroneously believe that current practices established by SAB 51 are working satisfactorily and, hence, there is no compelling need to bar gain recognition. If the FASB's goals are to minimize the amount of accounting opportunism, then this study provides evidence that is compatible with the stipulation from the original Exposure Draft to disallow gain recognition.

Several future extensions for this paper are planned. The sample will be expanded to include subsidiary stock offerings occurring before SAB 51 allowed gains to be recognized. The predictions of the earnings management hypothesis should not apply to this subgroup. Therefore, a comparison of the pre- and post-SAB 51 subsidiary offerings would provide additional evidence on the applicability of the earnings management hypothesis to these transactions.

A second possible extension is to replicate Schipper and Smith (1986) and Slovin and Sushka (1997) for the sample of subsidiary stock offerings in this study. According to these studies, announcements of subsidiary stock offerings are associated, on average, with increases in parent firm share prices. An interesting question to investigate would be whether increases in parents' stock prices are due to changes in the market's expectation of the parent firms' earnings prospects. As a proxy for the change in the market's expectations, I would use the percentage change in analysts' forecasts in the period surrounding the subsidiary stock offering.

Finally, to gain further insights into the nature of the information conveyed by subsidiary stock issuances, I would examine the relationship between parent firms' announcement period abnormal returns and the earnings management and corporate finance variables used in the current analysis. I would expect the announcement period returns to be positively related to the corporate finance variables and negatively related to the earnings management variables.

APPENDIX A
ENRON COMMENT LETTER ON EXPOSURE DRAFT

Letter of Comment No. 53A
File Reference: 1082-154
Date Received: 2/27/96

Jack L. Tompkins
Senior Vice President
Chief Information, Administrative
and Accounting Officer

ENRON
CORP

P. O. Box 1188
Houston, Texas 77251-1188
(713) 853-6212

February 23 1996

Mr Dennis R. Beresford
Chairman
Financial Accounting Standards Board
401 Merritt
Norwalk, Connecticut 06856

Dear Mr Beresford:

This letter is written in support of various testimonies tendered before the Financial Accounting Standards Board on February 22nd concerning the Proposed Statement of Financial Accounting Standards Consolidated Financial Statements: Policy and Procedures and amends our letter addressed to you dated January 11 1996.

Specifically we believe that the shareholders of Enron and many other companies could experience significant economic harm under the current proposal. Enron s common stock is evaluated and traded basically as a product of its net income and earnings per share. To the extent that ARB 51 gains are deleted from net income in the future it is logical that the trading price of Enron s common stock would be lower than it otherwise would be including the gains.

Income associated with the sale of subsidiary investments (via IPO's or otherwise) is in many cases the sole means of realizing the value of these investments. These gains evidence management's success in creating or enhancing the value of the subsidiary. From a financial analyst's view this is no different than selling any other corporate asset, and recognizing income when the value of this asset exceeds the book value. In Enron s case, the majority of the analysts who report on our stock consider these gains as "recurring" net income. However we believe that such gains will be ignored by these same analysts for valuation purposes to the extent the gains are omitted from reported income.

With Enron common stock trading with a price earnings ratio in excess of sixteen, a decrease in net income of as little as $15 million dollars would cascade into aggregate losses to Enron shareholders of nearly $250 million dollars.

Mr. Dennis R. Beresford
Financial Accounting Standards Board
February 23, 1996
Page Two

We urge the Board to carefully consider the economic harm to shareholders that could result from the current proposal. Further, we ask that you conclude that ARB 51 gains represent true economic gain to an enterprise and should be recognized in earnings at the time of transaction.

We appreciate the opportunity to further express our views to the Board.

Very truly yours,

Jack

APPENDIX B
TESTS OF FINANCE HYPOTHESES USING SUBSAMPLE OF PARENT FIRMS

Table B.1 Parent Firms with Subsidiary Offerings Whose Ratio of Gain to Net Sales Is in the Upper One-third of the Sample. This subsample of parent firms is compared to a "matched" sample of parent firms that issued their own stock. Test of overvaluation hypothesis. The significance level is for a one tailed test under the alternative hypothesis that the parent firms with subsidiary offers had smaller increases in price in the (one- or two-year) period ending with the year of offering than parents with parent offerings.

	Subsample of Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1 Prior One-Year Percentage Change in Price			
N	35	185	
Mean	28.02	151.749	0.216^{a}
Median	-11.01	15.693	0.052^{b}
Panel 2 Prior Two-Year Percentage Change in Price			
N	35	176	
Mean	27.86	127.003	0.121^{a}
Median	3.57	23.175	0.053^{b}

^{a} Significance level under a one-tailed t test

^{b} Significance level under a one-tailed Wilcoxon rank sum test

Table B-2. Parent Firms with Subsidiary Offerings Whose Ratio of Gain to Net Sales Is in the Upper One-third of the Sample. This subsample of parent firms is compared with a "matched" sample of parent firms that issued their own stock. Test of Earnings Prospects Hypothesis. The significance level is for a one tailed test under the alternative hypothesis that parent firms with subsidiary offers have smaller increases in earnings than parent firms that issue their own stock. One year change in income is scaled by lagged assets.

	Subsample of Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1 One-Year Change in Operating Income			
N	36	185	
Mean	0.006	0.037	0.023[a]
Median	0.006	0.022	0.005[b]
Panel 2 One-Year Change in Net Income			
N	36	195	
Mean	-0.051	0.017	0.001[a]
Median	-0.020	0.014	0.451[b]

[a] Significance level under a one tailed t test

[b] Significance level under a one-tailed Wilcoxon rank sum test subsidiary stock

Table B-3 Parent Firms with Subsidiary Offerings Whose Ratio of Gain to Net Sales Is in the Upper One third of the Sample. This subsample of parent firms is compared with "matched" sample of parent firms that issued their own stock. Tests of the Profitability of the Firm's Investment Opportunities. Tobin's q is the ratio of the sum of the book value of debt and market value of equity to the book value of total assets. The significance level is for a one tailed t test for the difference in the means and a one tailed Wilcoxon test for the difference between the medians.

		Subsample of Parents with Subsidiary Offers	Parents with Parent Offers	Significance Levels
Panel 1	Tobin's Q--Year Before Offer			
	N	35	192	
	Mean	0.873	1.432	0.046
	Median	0.809	1.037	0.034
Panel 2	Tobin's Q--Year of Offer			
	N	35	187	
	Mean	1.082	1.423	0.067
	Median	0.877	1.109	0.007
Panel 3	Market-to-Book Equity--Year Before Offer			
	N	36	183	
	Mean	2.027	2.178	0.434
	Median	1.571	1.924	0.061
Panel 4	Market-to-Book Equity--Year of Offer			
	N	36	199	
	Mean	1.848	1.836	0.497
	Median	1.555	1.943	0.006
Panel 5	EPS (Operating) to Price--Year Before Offer			
	N	30	174	
	Mean	0.160	0.143	0.236
	Median	0.118	0.115	0.451
Panel 6	EPS (Operating) to Price--Year of Offer			
	N	27	182	
	Mean	0.190	0.138	0.012
	Median	0.152	0.117	0.259

Table B-4 Parent Firms with Subsidiary Offerings Whose Ratio of Gain to Net Sales Is in the Upper One-third of the Sample: Comparisons of Actual Growth Measures. The significance levels for a one-tailed t test for the difference in the two means and a one-tailed Wilcoxon test for the difference between the medians

		Subsample of Parents with Subsidiary Offers	Parents with Parent Offers	Significance Level
Panel 1	Net Investments-Year of Offer			
	N	19	141	
	Mean	0.059	0.194	0.110
	Median	0.023	0.073	0.066
Panel 2	One-Year Employment Growth			
	N	33	197	
	Mean	0.154	0.182	0.329
	Median	0.060	0.074	0.136
Panel 3	Three Year Employment Growth			
	N	32	187	
	Mean	0.394	0.792	0.117
	Median	0.227	0.256	0.103
Panel 4	R&D/Sales Year of Offer			
	N	19	84	
	Mean	0.053	0.119	0.269
	Median	0.016	0.020	0.500

Table B.5 Parent Firms with Subsidiary Offerings Whose Ratio of Gain to Net Sales Is in the Upper One third of the Sample. Tests on Levels and Changes in Leverage. The significance levels are the results of a one tailed t test of the differences in the means and a one-tailed Wilcoxon test of the difference in the medians for the two samples of parent firms.

		Subsample of Parents with Subsidiary Offers	Parents with Parent Offers	Significance Levels
Panel 1	Book Leverage-Year Before Offer			
	N	35	192	
	Mean	0.327	0.308	0.291
	Median	0.302	0.314	0.278
Panel 2	Book Leverage-Year of Offer			
	N	35	198	
	Mean	0.324	0.248	0.011
	Median	0.331	0.253	0.031
Panel 3	Prior Two-Year Change in Total Debt/Assets			
	N	34	183	
	Mean	0.016	0.002	0.314
	Median	-0.011	0.007	0.446
Panel 4	Two-Year Change in Liabilities/Assets			
	N	35	184	
	Mean	0.053	0.007	0.031
	Median	0.023	0.004	0.080

REFERENCES

Akerlof G A (1970) The market for lemons Qualitative uncertainty and the market mechanism Quarterly Journal of Economics, 84 (August) 488-500

Allen J W & McConnell J J (1998 February) Equity carve outs and managerial discretion The Journal of Finance, 53(1) 163-185

Ambarish R John K & Williams J (1987) Efficient signalling with dividends and investments Journal of Finance, 42 321 344

American Institute of Certified Public Accountants (1961) Accounting research and technology bulletins, final edition New York Author

American Institute of Certified Public Accounts Accounting Standards Division (1980) Accounting in consolidation for issuances of a subsidiary s stock Issues Paper New York Author

Anslinger P Carey D Fink K & Gagnon C (1997) A new spin on the corporate structure Corporate Finance, 153 39-43

Asquith P & Mullins D W (1986) Equity issues and offering dilution Journal of Financial Economics, 15 61-89

Balsam S Haw I & Lilien S B (1995) Mandated accounting changes and managerial discretion Journal of Accounting and Economics, 20 3-29

Barclay M J & Lizenberger R H (1988) Announcement effects of new equity issues and the use of intraday price data Journal of Financial Economics, 21 71 99

Bartov E (1993) The timing of asset sales and earnings manipulation Accounting Review, 68 840-855

Beidleman C (1973) Income smoothing The role of management Accounting Review, 48 653-667

Beresford D R (1998 Winter) Should the FASB abandon the consolidation project? The Journal of Corporate Accounting and Finance, 9(2) 51 55

Beresford D R & Dudeck D J (1984 February) Accounting for subsidiary stock sales--SEC staff accounting bulletin no 51 The CPA Journal 63-65

Berton L (1984 November 16) Accounting rule allowing ITT to take gain of $54 7 million raises questions The Wall Street Journal p 20

Bowen, R., Burgstahler, D., & Daley, L. (1986). Evidence on the relationship between earnings and various measures of cash flow. The Accounting Review, 61, 713-725.

Bradley, M., Jarrell, G. A., Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. Journal of Finance, 39, 857-878.

Brief, A. P., Dukerich, J. M., Brown, P. R., & Brett, J. F. (1996). What is wrong with the Treadway commission report? Experimental analyses of the effects of personal values and codes of conduct on fraudulent financial reporting. Journal of Business Ethics, 15, 183-198.

Brous, P. A. (1992). Common stock offerings and earnings expectations: A test of the release of unfavorable information. Journal of Finance, 47, 1517-1536.

Bruns, W. J., & Merchant, K. A. (1990). The dangerous morality of managing earnings. Management Accounting, 72, 22-25.

Castle, G. R. (1980). Term lending- A guide to negotiating term loan covenants and other financial restrictions. Journal of Commercial Bank Lending, 63(3), 26-39.

Christie, A. (1990). Aggregation of test statistics: An evaluation of the evidence on contracting and size hypotheses. Journal of Accounting and Economics, 12, 15-36.

Chung, K. H., & Charoenwong, C. (1991, Autumn). Investment options, assets in place and risks of stocks. Financial Management, 20, 21-33.

Committee on Accounting Procedure. (1959). Consolidated financial statements. Accounting Research Bulletin No. 51. New York, New York.

Cooney, J. W. Jr., & Kalay, A. (1993). Positive information from equity announcements. Journal of Financial Economics, 33, 149-172.

Crutchley, C. E., Hudson, C. D., & Jensen, M. R. (1994/1995, Winter). Corporate earnings and financing: An analysis of cancelled vs. completed offerings. Journal of Applied Business Research, 7(1), 46-58.

Dann, L., & Mikkelson, W. (1984). Convertible debt issuance, capital structure change and financing related information: Some new evidence. Journal of Financial Economics, 13, 157-186.

Davis, M., & Largay, J. (1988). Reporting consolidated gains and losses on subsidiary stock issuances. Accounting Review, 63(2), 348-363.

Davis, M., & Largay, J. (1989, June 12). SAB 51, where are you? Barron's, 48-50.

DeAngelo, L. E. (1986, July). Accounting numbers as market valuation substitutes: A study of management buyout of public stockholders. Accounting Review, 61, 400-420.

DeAngelo, H., DeAngelo, L., & Skinner, D. (1994). Accounting choices in troubled companies. Journal of Accounting and Economics, 17, 113-143.

Dechow P Sloan R G & Sweeney A P (1995) Detecting earnings management The Accounting Review, 70 193-225

DeFond M L & Jiambalvo J (1991 July) Incidence and circumstances of accounting errors The Accounting Review, 66 643-655

Denis D (1994) Investment opportunities and the market reaction to equity offerings Journal of Financial and Quantitative Analysis, 29 159-173

Duke J & Hunt H (1990) An empirical examination of debt covenant restrictions and accounting related debt proxies Journal of Accounting and Economics, 12 45-63

Elliott, J A & Hanna J D (1996) Repeated accounting write offs and the information content of earnings Journal of Accounting Research, 34(Suppl) 135-156

Elliott J A & Shaw W H (1988) Write offs as accounting procedures to manage perceptions Journal of Accounting Research,26 (Supplement) 91-119

Financial Accounting Standards Board (1987) Consolidation of all majority owned subsidiaries Statement of financial accounting standards no 94 Norwalk CT Author

Financial Accounting Standards Board (1986 June 2) Recognition of gain under SAB 51 Emerging Issues Task Force, Minutes of Meeting Norwalk CT Author

Financial Accounting Standards Board (1991) Discussion memorandum An analysis of issues related to consolidation policy and procedures Norwalk CT Author

Financial Accounting Standards Board (1995) Proposed statement of financial accounting standards, Consolidated Financial Statements Policy and Procedures Norwalk CT Author

Fink R (1997 July) Off again on again CFO, The Magazine for Senior Financial Executives, 13(7) 67-71

Francis J Hanna J D & Vincent L (1996) Causes and effects of discretionary asset write-offs Journal of Accounting Research, 34(Suppl) 117-135

Gaver J J & Gaver K M (1993) Additional evidence on the association between the investment opportunity set and corporate financing dividend and compensation policies Journal of Accounting and Economics, 16 125-160

Gaver J J Gaver K M Austin J R (1995) Additional evidence on bonus plans and income management Journal of Accounting and Economics, 19 3-29

Greenhouse S (1986 March 2) The folly of inflating quarterly profits New York Times (Section 3) 1-8

Hand J (1989 October) Did firms undertake debt equity swaps for an accounting paper profit or true financial gain? Accounting Review 567-623

Hand J Hughes P & Sefcik S (1990) Insubstance defeasances Journal of Accounting and Economics, 13 47-88

Hansen R S & Crutchley C (1990) Corporate earnings and financing An empirical analysis Journal of Business, 63 347 371

Healy P (1985) The effect of bonus schemes on accounting decisions Journal of Accounting and Economics, 7 85 107

Hertzel M & Jain P (1991) Earnings and risk changes around stock repurchase tender offers Journal of Accounting and Economics 14 253 274

Holthausen R W Larcker D F & Sloan R G (1995) Annual bonus schemes and the manipulation of earnings Journal of Accounting and Economics, 19 29 74

Israel R Ofer A R & Siegel E R (1989) The information content of equity-for debt swaps Journal of Financial Economics, 25, 349-370

Jain B A & Omesh K (1994) The post issue operating performance of IPO firms Journal of Finance 49 1699-1725

Jagadeesh N Weinstein M & Welch I (1993) An empirical investigation of IPO returns and subsequent equity offerings Journal of Financial Economics, 34 153 175

Jensen M (1986) Agency costs of free cash flow American Economic Review 76 323-329

Jensen M (1989) Active investors LBO s privatization of bankruptcy Journal of Applied Corporate Finance, 2 35 44

Jones J J (1988) The effect of foreign trade regulation on accounting choices and production and investment decisions Unpublished doctoral dissertation University of Michigan Ann Arbor

Jung K Kim Y C & Stulz R M (1996) Timing investment opportunities managerial discretion and the security issue decision Journal of Financial Economics, 42 159-185

Kelly L (1983) The development of a positive theory of corporate management s role in external financial reporting Journal of Accounting Literature, 2 111 146

Klein A, Rosenfeld J & Baranek W (1991) The two stages of an equity carve out and the price response of parent and subsidiary stock Managerial and Decision Economics, 12 449-460

Korajczyk R Lucas D & McDonald R (1990) Understanding Stock Price Behavior around the Time of Equity Issues In R G Hubbard (Ed) Asymmetric information, corporate finance, and investment (pp 257 277) Chicago The University of Chicago Press

Lang L Ofek E & Stulz R (1996) Leverage investment and firm growth Journal of Financial Economics, 40 3-29

Leftwich R (1980) Market failure fallacies and accounting information Journal of Accounting and Economics, 2 193-211

Leland H & Pyle D (1977) Informational asymmetries financial structure and financial intermediation Journal of Finance, 32 371 387

Linden D W (1990 November 12) Lies of the bottom line Forbes, 146 106-112

Loughran T & Ritter J R (1995) The new issues puzzle Journal of Finance, 50 23-51

Lucas D J & McDonald R L (1991) Equity issues and stock price dynamics Journal of Finance 1019-1043

Lys T & Sivaramakrishnan K (1988) Earnings expectations and capital restructurings The case of equity-for debt swaps Journal of Accounting Research, 29 273-299

Marsh P (1982) The choice between equity and debt An empirical study Journal of Finance, 37 121-144

Masulis R W & Korwar A N (1986) Seasoned equity offerings Journal of Financial Economics, 15 91 118

McNichols M & Wilson G P (1988) Evidence of earnings management from the provision for bad debts Journal of Accounting Research, 26 (Supplement) 1 31

Miller M & Rock K (1985) Dividend policy under asymmetric information Journal of Finance, 40 1031-1052

Moses O D (1987) Income smoothing and incentives Empirical tests using accounting changes The Accounting Review, 62 358 377

Myers S & Majluf N (1984) Corporate finance and investment decisions when firms have information investors do not have Journal of Financial Economics, 13 187 222

Nanda V (1991 December) On the good news in equity carve-outs Journal of Finance, 46 1717-1734

Norris F (1994 June 26) Once again a time to be confident New York Times, p C1

Ofek E (1993) Capital structure and firm response to poor performance Journal of Financial Economics, 34 3-30

Ofer A R & Siegel D R (1987) Corporate financial policy Information and market expectations An empirical investigation of dividends Journal of Finance, 42 889-911

Patel A. Emery D R & Lee Y W (1993) Firm performance and security type in seasoned offerings An empirical examination of alternative signaling models *The Journal of Financial Research, 16* 181-195

Pilotte E (1992) Growth opportunities and the stock price response to new financing *Journal of Business, 65* 371-395

Powell T C (1996) How much does industry matter? *Strategic Management Journal, 7* 323-334

Pratt J (1990) *Financial accounting* Glenview IL Scott Foresman/Little Brown Higher Education

Press E G & Weintrop J (1990) Accounting-based constraints in public and private debt agreements Their association with leverage and impact on accounting choice *Journal of Accounting and Economics, 12* 65-95

Pulliam S & Berton L (1994 November 2) A restructuring of write-offs in the making *The Wall Street Journal* p C 1

Ravenscraft D & Scherer F M (1991) Divisional sell off A hazard function analysis *Managerial and Decision Economics, 12* 429-438

Ritter J R (1991) The long run performance of initial offerings *Journal of Finance, 46* 3-27

Ronen J & Sadan S (1981) *Smoothing income numbers* Reading MA Addison Wesley

Rosenzweig K & Fischer M (1994 November) Is managing earnings ethically acceptable? *Management Accounting, 75* 31-34

Ross S (1977 Spring) The determination of financial structure The incentive signaling approach *Bell Journal of Economics* 23-40

Rue J & Volkan A (1994) Accounting for subsidiary stock transactions *National Public Accountant, 46* 32-34 46

Schipper, K (1989 December) Commentary on earnings management. *Accounting Horizons* 91-102

Schipper K & Smith A (1986) Equity carve-outs and seasoned equity offerings *Journal of Financial Economics, 15* 153-186

Scott W (1995 December 31) Personality parade *The Gainesville Sun, Parade Magazine* New York Parade Publications p 2

Securities and Exchange Commission (1983 March 29) Accounting for sales of stock by subsidiary company *Staff Accounting Bulletin No 51* Washington DC Author

Securities and Exchange Commission. (1989, August 7). Views regarding accounting in consolidation for issuances of a subsidiary's stock that cause changes in the parent's ownership percentage in the subsidiary. *Staff Accounting Bulletin No. 84*. Washington, DC: Author.

Skinner, D. J. (1993). Investment opportunities and accounting choice. *Journal of Accounting and Economics, 16*, 407-445.

Slovin, M. B., & Sushka, M. E. (1997). The implications of equity issuance decisions within a parent subsidiary governance structure. *Journal of Finance, 52*, 841-857.

Slovin, M. B., Sushka, M. E., & Ferraro, S. R. (1995). A comparison of the information conveyed by equity carve-outs, spin-offs, and asset sell-offs. *Journal of Financial Economics, 37*, 89-104.

Smith, C. W., & Warner, J. B. (1979, June). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics, 7*, 117-161.

Smith, C. W., & Watts, R. L. (1992). Financing, dividend, and compensation policies. *Journal of Financial Economics, 32*, 263-292.

Smith, R., Lipin, S., & Naj, A. K. (1994, November 3). How General Electric damps fluctuations in its annual earnings. *The Wall Street Journal*, p. A1, A6.

Spiess, D. K., & Affleck-Graves, J. (1995). Underperformance in long-run stock returns following seasoned equity offerings. *Journal of Financial Economics, 38*, 243-267.

Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *The Quarterly Journal of Economics, 104*, 655-669.

Taggart, R. A., Jr. (1977). A model of corporate financing decisions. *Journal of Finance, 32*, 1467-1484.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance, 42*, 1-20.

Tompkins, J. (1996, February 23). *Comment letter to Dennis R. Beresford, chairman of Financial Accounting Standards Board*. Norwalk, CT: Financial Accounting Standards Board.

Trueman, B., & Titman, S. (1988). An explanation for accounting income smoothing. *Journal of Accounting Research 26* (Supplement), 127-139.

Vercammen, P. (Producer). (1995, May 25). Hollywood accounting denies *Gump* profitability. *CNN News*. Atlanta: CNN.

Watts, R. (1977, April). Corporate financial statements, a product of the market and political processes. *Australian Journal of Management, 2*, 53-75.

Watts, R., & Zimmerman, J. (1978, January). Towards a positive theory of the determination of accounting standards. *Accounting Review, 53*, 112-134.

Watts R & Zimmerman J (1986) Positive accounting theory Englewood Cliffs NJ Prentice-Hall

Weisbach M (1988) Outside directors and CEO turnover Journal of Financial Economics, 20 431-460

Worthy F S (1984 June 25) Manipulating profits How it s done Fortune, 108 50 54

Zehms K M (1986 April) Subsidiary stock issuances to third parties The CPA Journal 66-68

Zmijewski M E & Hagerman R L (1981) An income strategy approach to the positive theory of accounting standard setting/choice Journal of Accounting and Economics, 3 129 149

BIOGRAPHICAL SKETCH

Deborah Pendarvis was born in Lake Charles, Louisiana. She received her B.A. with a major in mathematics and French education from McNeese State University. After several years of teaching mathematics and Spanish at the secondary level, Ms. Pendarvis completed her M.A. in accounting and information systems at the University of West Florida in 1985. She received her C.P.A. license in Florida in 1985.

After working in public accounting for one year, Ms. Pendarvis became an instructor of accounting at the University of Southern Mississippi in Hattiesburg, Mississippi. She left in 1989 to enter the doctoral program at the University of Florida.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Bipin B. Ajinkya, Chair
Professor of Accounting

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

John Simmons
Distinguished Service Professor of
Accounting

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Joel Houston
Associate Professor of Finance, Insurance
and Real Estate

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Robert D. Emerson
Professor of Food and Resource
Economics

This dissertation was submitted to the Graduate Faculty of the Fisher School of Accounting in the College of Business Administration and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 1998

Dean, Graduate School